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Evaluation of Five Regulatory Decision-Making Processes Affecting Puget Sound's Water Quality

JRB Associates, Inc., McLean, VA

Prepared for

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EVALUATION OF FIVE REGULATORY DECISION-MAKING PROCESSES AFFECTING PUGET SOUND'S WATER QUALITY

November 29, 1983

Submitted to:

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and Region X
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

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Submitted by:

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Puget Sound is a complex and productive estuary with a great diversity of resources. The realization of all its potential may be difficult because of inherent conflicts and competition between multiple uses.

Government agencies are responsible for regulating both resources and uses. Much of this regulation overlaps between agencies. This study investigates five decision-making processes that affect water quality in Puget Sound. In each process, high levels of agency interaction are evident. They are: Clean Water Act Section 301(h) waivers of secondary treatment, Clean Water Act Section 404 dredge and fill permits, the proposed Federal navigation improvement project in the Duwamish River, designation of open water disposal sites for dredged materials, and redesignation of the Fourmile Rock open water disposal site.

From the study, specific areas were found where decision-making processes and information bases could be improved. The problem areas and difficulties had to do with inadequate data and resources, a lack of both specific criteria and general guidelines, statutory or regulatory clarification of agencies responsibilities and authorities, and a need for better overall management perspectives.

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1. EXECUTIVE SUMMARY

Puget Sound is a fjord-like sea consisting of interconnected bays, inlets and channels. Tidal water enters from the west and freshwater streams enter at points throughout the system. This complex and productive estuary provides a diversity of resources and uses including recreation, transportation, commerce, fishing, aquaculture, research, waste disposal, and aesthetic enjoyment. It may be difficult to fully realize all of the Sound's potential because of inherent conflicts and competition between multiple uses. For example, aquaculture and waste disposal uses in the same area may be undesirable. As one official phrased it, "People and shellfish are incompatible."(65F)

Government agencies are charged with regulating both resources and uses. Agencies' authorities sometimes coincide because their missions include regulation of conflicting uses. This overlap of missions is apparent in Puget Sound where water, land and people meet. For example, the U.S. Army Corps of Engineers protects and enhances navigation, while the National Marine Fisheries Service protects and enhances fisheries. The State of Washington even has two discrete agencies to regulate commercial and game fishing. Further, some agencies have internally inconsistent missions. For instance, the Washington Department of Natural Resources both regulates and promotes the use of natural resources. In addition, there is parallelism between Federal and State authorities and responsibilities. As an example, the U.S. Environmental Protection Agency and the Washington Department of Ecology both regulate waste discharges.

In Governing Puget Sound, R. L. Bish suggests that the State of Washington has an open government structure and that Federal, State and local regulatory agencies share decision-making responsibilities.(4) In his view, the overlap in the decision-making process is generally good in that it allows agencies to evaluate each others' activities. Its accessibility also permits public involvement in decision-making, allowing resource users to have a role in resource management and regulation.

This study has investigated five decision-making processes that affect water quality in Puget Sound. They are:

- Clean Water Act Section 301(h) waivers of secondary treatment
- Clean Water Act Section 404 dredge and fill permits
- The proposed Federal navigation improvement project in the Duwamish River
- Designation of open water disposal sites for dredged materials
- Redesignation of the Fourmile Rock open water disposal site.

In each process, public accessibility and high levels of agency interaction are evident. However, there are also areas where decision-making processes and informational bases can be improved. Major conclusions intersect all five decision-making processes and are summarized below.

- Data - Inadequate data constrain regulatory agencies from making completely informed decisions in specific cases and in general. As an example, more sampling data and long-term monitoring are needed to characterize dredged spoils and to determine their effects when discharged in Puget Sound. Continued research will improve understanding of the effects of individual discharges and the overall impacts of all pollutant inputs to the Sound.

- Resources - Inadequate resources constrain agencies from completely fulfilling their missions. The Washington Department of Natural Resources illustrates this well because it does not have the personnel or funds to fulfill its current responsibilities vis-a-vis site monitoring much less to expand its regulatory activities in this area. In this case and in general, increased resources could allow more data collection and monitoring and enforcement of standards, faster processing and review of applications, and improved interagency coordination.

- Criteria and Standards - Lack of both specific criteria and general guidelines impede sound decision-making. For example, numerical sediment criteria are needed to assess existing conditions and activities at open water disposal sites and to evaluate dredged sediments proposed for discharge. Also, guidelines for consistent, comprehensive sampling and monitoring would increase the reliability and comparability of information on dredging sites and disposal activities.

- Statutory or Regulatory Action - Statutory or regulatory clarification of agencies' responsibilities and authorities could improve decision-making processes. The Clean Water Act Section 301(h) waiver process is a case where legislative action is needed to clarify the State's authority to grant waivers from secondary treatment. Waivers are currently considered inconsistent with State law. In the case of open water disposal sites, the Washington Department of Natural Resources' role can be expanded administratively to develop a stronger regulatory program. Also, new regulatory programs may be needed to provide additional landfill capacity in the Puget Sound area.

- Overall Management - A better overall management perspective is needed to guide research, obtain resources, develop criteria, and clarify responsibilities. Although there is overlap, agencies' separate missions and regulatory programs can limit their perspectives and their consideration of other agencies' roles. For instance, Federal agencies rarely consider the significance of local agencies' contributions to decision-making, although localities are responsible for shoreline management in the State of Washington. A broader perspective could ensure that agencies' roles dovetail rather than overlap.

2. INTRODUCTION

As economic and population growth continue in the coastal areas of the Pacific Northwest, greater stress is being placed on the water quality of Puget Sound (see Figure 2-1). Development activities in the area can be linked to a variety of water quality problems, as evidenced by deteriorating water quality, contaminated sediments and biota, and changes in estuarine species composition. Control, prevention and mitigation of such adverse effects may be accomplished through regulatory decisions made by Federal, State and local environmental agencies.

Until recently, water quality management programs developed under the Clean Water Act have focused on freshwater systems. Now, with the occurrence of increasingly complex water quality problems in estuarine areas such as Puget Sound, the U.S. Environmental Protection Agency is examining the relationship between regulatory decision-making and estuarine water quality as part of an effort to ensure that data gathering efforts support management needs. Analysis of the relationship between decision-making and estuarine water quality requires identification of regulated activities likely to have an impact on water quality and evaluation of the processes through which regulatory decisions are made. The purpose of this report is to present five case studies of regulatory decision-making that affect Puget Sound's water quality.

2.1 PROJECT APPROACH

The information used to prepare this report was gathered in two tasks.

2.1.1 Task I: Prepare a List of Water Quality Regulatory Decisions for Puget Sound

In Task I, JRB gathered information to develop a list of major decisions affecting Puget Sound's water quality that are likely to be made by Federal, regional and/or State personnel during the next five to ten years. This was accomplished in two phases. In Phase I, a literature review of JRB and EPA data bases and reports was conducted to identify planned or potential activities that may require regulatory resolution. In Phase II, JRB analysts

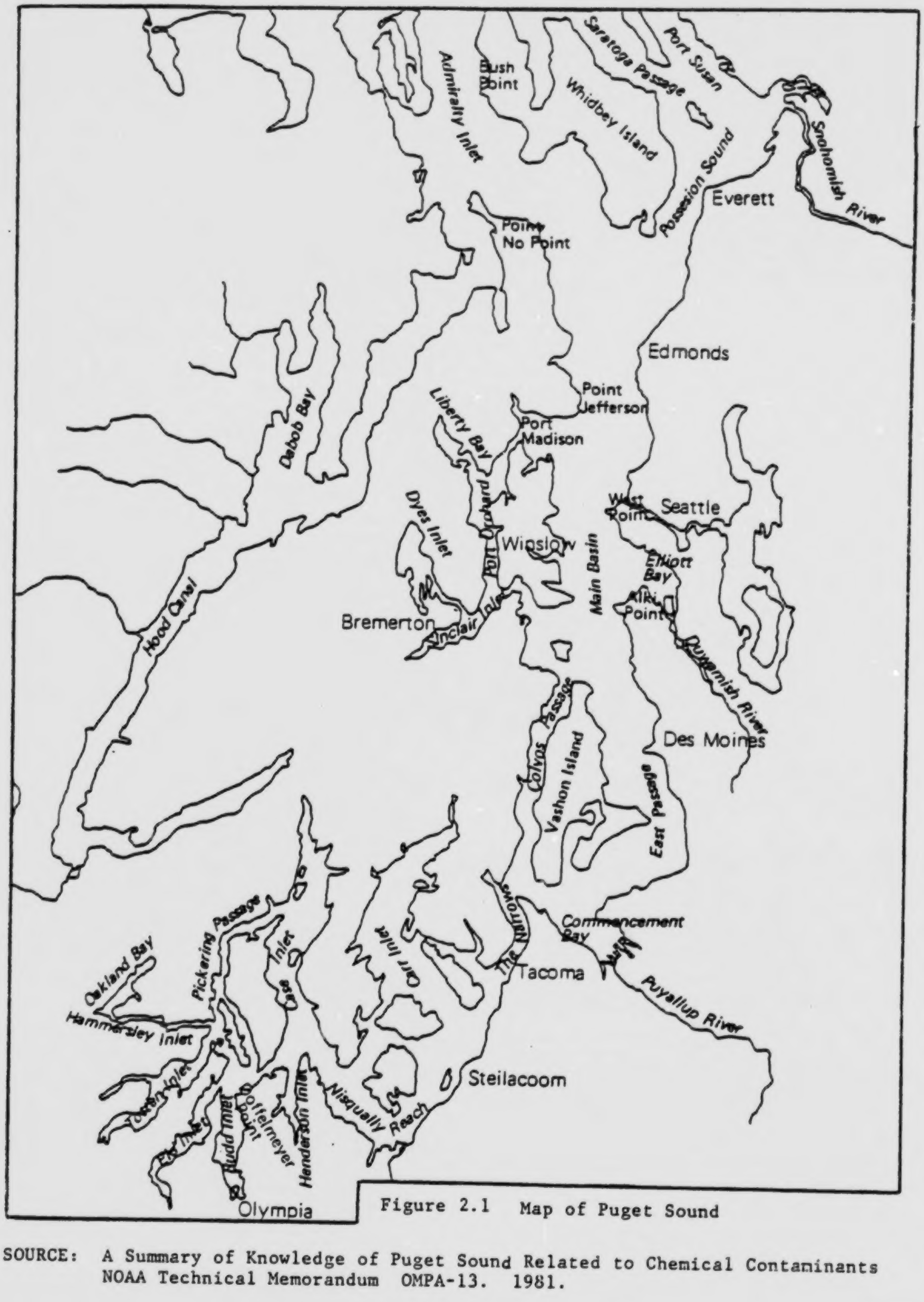

Bush Point
Admiralty Inlet
Saratoga Passage
Port Susan
Whidbey Island
Possession Sound
Snohomish River
Everett
Point No Point
Edmonds
Point Jefferson
Port Madison
Liberty Bay
Dabob Bay
Dyes Inlet
Port Orchard
Winslow
Main Basin
West Point
Seattle
Elliott Bay
Alki Point
Bremerton
Sinclair Inlet
Hood Canal
Duwamish River
Colvos Passage
Vashon Island
Des Moines
East Passage
The Narrows
Commencement Bay
Tacoma
Puyallup River
Carr Inlet
Case Inlet
Pickering Passage
Oakland Bay
Hammersley Inlet
Totten Inlet
Eld Inlet
Budd Inlet
Cooper Point
Boston Harbor
Olympia
Henderson Inlet
Nisqually Reach
Steilacoom

Figure 2.1 Map of Puget Sound

SOURCE: A Summary of Knowledge of Puget Sound Related to Chemical Contaminants NOAA Technical Memorandum OMPA-13. 1981.

conducted interviews in Washington State to verify the importance of issues identified in Phase I. Discussions with Federal, regional and State personnel resulted in the following list of water quality-related regulatory decisions:

- Clean Water Act Section 301(h) Waivers
- Clean Water Act Section 404 Dredge and Fill Permits
- Designation of Dredged Material Disposal Sites
- Superfund Sites
- Decertification of Commercial Shellfish Harvesting Areas
- Air Emissions
- Pretreatment
- New Source NPDES Permits.

Two specific decisions were added to those listed above, based upon interest expressed by EPA Region X. They are:

- Redesignation of the Fourmile Rock Dredged Material Disposal Site
- Duwamish River Dredging Project.

Each of the issues listed above is discussed in a report entitled "Preliminary List of Projected Water Quality-Related Regulatory Decisions For Puget Sound," dated August 30, 1983. A list of officials contacted during Task I is presented in Table 2-1.

2.1.2 Task II: Evaluate Decision Process for Selected Water Quality Regulatory Decisions

In Task II, JRB evaluated the decision-making processes for five regulatory decisions selected by the EPA Project Officer. Those regulatory processes analyzed are:

- Clean Water Act Section 301(h) Waivers
- Clean Water Act Section 404 Dredge and Fill Permits
- Duwamish River Dredging Project
- Designation of Dredged Material Disposal Sites
- Redesignation of the Fourmile Rock Dredged Material Disposal Site.

TABLE 2-1

OFFICIALS CONTACTED DURING TASK I INTERVIEWS

U.S. Environmental Protection Agency, Region X, Seattle, Washington

John Armstrong, Biologist, Ocean Programs Team, Water Permits and Compliance Branch, Water Division

Florence Carroll, NPDES Data Systems, Water Compliance Team, Water Permits and Compliance Branch, Water Division

Jim Everts, Superfund Enforcement and Contracts Section, Toxic Substances Control Branch, Air and Waste Management Division

Charles Findley, Deputy Director, Air and Waste Management Division

Carl Kassebaum, Environmental Engineer, Water Resources Assessment Team, Environmental Evaluation Branch, Water Division

Marcia Lagerloaf, Leader, Ocean Programs Team, Water Permits and Compliance Branch, Water Division

Joan McVamee, Environmental Engineer, Superfund Management Section, Toxic Substances Control Branch, Air and Waste Management Division

Elbert Moore, NPS Specialist, Water Planning Section, Water Quality Branch, Water Division

Gary O'Neal, Director, Environmental Services Division

Dan Petke, Environmental Engineer, IPA, Redmond

Robert Robichaud, Acting Pretreatment Coordinator, Water Permits Team, Water Permits and Compliance Branch, Water Division

John Underwood, Chief, Water Quality Branch, Water Division

Richard White, Environmental Engineer, Air Program Development Section, Air Programs Branch, Air and Waste Management Division

Thomas Wilson, Chief, Water Planning Section, Water Quality Branch, Water Division

U.S. Army Corps of Engineers, Seattle District, Seattle, Washington

John Malek, Environmental Planner

Keith Phillips, Oceanographer, Environmental Resources Section, Planning Branch, Engineering Division

TABLE 2-1 (Continued)

OFFICIALS CONTACTED DURING TASK I INTERVIEWS

James Towle, Project Manager

Fred Weinmann, Biologist, Environmental Resources Section, Planning Branch, Engineering Division

Washington State

Eric Hurlburt, Fisheries Biologist, Washington Department of Fisheries, Olympia, Washington

David Jamison, Director, Marine Research and Development, Marine Land Management Division, Department of Natural Resources, Olympia, Washington

Phil Kauzloric, Marine Habitat Manager, Environmental Planning and Permits Section, Habitat Management Division, Washington Department of Fisheries

Ken Merry, Chief, Office of Environmental Health Programs, Department of Social and Health Services, Olympia, Washington

Bob Monn, Section Head, Water Quality Management and Planning Section, Office of Water Quality Management, Water Quality Management Division, Department of Ecology, Olympia, Washington

To gather the information required for this task, JRB analysts returned to Washington State to conduct in-depth interviews with Federal, regional and State personnel. To facilitate the interview process, a questionnaire was developed and distributed to individuals with expertise in each decision-making process. A copy of the questionnaire is provided in Appendix A. A list of officials interviewed in Task II is presented in Table 2-2.

2.2 ORGANIZATION OF THE REPORT

The report contains seven sections. In addition to the executive summary/conclusions and this introduction, a section is devoted to each of the five selected regulatory decision-making processes. Included in each section is a discussion of the agencies involved, the decision process, the timing of the process and the decision criteria, coordination between agencies and obstacles to decision-making. Flow diagrams for the overall decision process indicating key participants, intermediate determinations and processes leading to the final decision are presented. Organizational charts for the key agencies are included.

TABLE 2-2

OFFICIALS CONTACTED DURING TASK II INTERVIEWS

U.S. Army Corps of Engineers, Seattle District, Seattle, Washington

Gail Arnold, Biologist, Environmental Resources Section, Planning Branch, Engineering Division

Warren Baxter, Permits Section, Regulatory Functions Branch, Operations Division

Stephen Martin, Biologist, Environmental Resources Section, Planning Branch, Engineering Division

Fred Weinmann, Biologist, Environmental Resources Section, Planning Branch, Engineering Division

U.S. Environmental Protection Agency, Region X, Seattle, Washington

John Armstrong, Biologist, Ocean Programs Team, Water Permits and Compliance Branch, Water Division

Carl Kassebaum, Environmental Engineer, Water Resources Assessment Team, Environmental Evaluation Branch, Water Division

Gary Voerman, Life Scientist, Water Resources Assessment Team, Environmental Evaluation Branch, Water Division

National Marine Fisheries Service, Seattle, Washington

Laurie Boch, Attorney, Office of General Counsel

Al Groves, Biologist

National Oceanographic and Atmospheric Administration, Seattle, Washington

Edward Long, Marine Biologist, Ocean Assessment Division

Washington Department of Ecology, Olympia, Washington

Carol Fleskes, Sanitary Engineer, Water Quality Management and Planning Section, Water Quality Management Division, Office of Water Quality Management

Ed Hammersmith, Sanitary Engineer, Shorelands Management Section, Shorelands Division, Office of Land and Water Resources

William Obert, Environmental Planner, Shorelands Planning Section, Shorelands Division, Office of Land and Water Resources

Joan Thomas, Division Supervisor, Water Quality Management Division, Office of Water Quality Management

TABLE 2-2 (Continued)

OFFICIALS CONTACTED DURING TASK II INTERVIEWS

Jim Thornton, Environmental Planner, Environmental Quality Section, Operations Management Division, Office of Operations and Enforcement

Washington Department of Fisheries, Olympia, Washington

Curtis Dahlgren, Marine Habitat Manager, Environmental Planning and Permits Branch, Habitat Management Division

Washington Department of Natural Resources

David Jamison, Director, Marine Research and Development, Marine Land Management Division

Seattle Department of Conservation and Land Use

Elsie Hulsizer, Senior Land Use Specialist, Land Use Division

3. CLEAN WATER ACT SECTION 301(h) WAIVERS

Section 301(h) of the Clean Water Act (CWA), 33 U.S.C. 1251 et. seq., allows a variance from the secondary treatment requirements of CWA Section 301(b)(1)(B) for POTWs discharging into marine and estuarine waters if certain criteria are met. The variance is equivalent to a waiver of secondary treatment requirements for the five-year life of a NPDES permit.

The Section 301(h) waiver program was created in a 1977 amendment to the CWA. Applications for this waiver were submitted by POTWs in 1979 and in 1982. The following discussion of regulatory history explains why there were two application periods and why applications submitted in 1979 are subject to different procedures than those submitted in 1982.

Proposed regulations for the Section 301(h) waiver program were published by EPA on April 25, 1978 (43 FR 17484) and became final on June 15, 1979 (44 FR 34784). To be eligible to apply, a POTW had to have an existing discharge to marine or estuarine waters as of December 27, 1977. A preliminary application had to be submitted to EPA by September 25, 1978, and a final application by September 13, 1979. Seventy applications were received, nationwide.

The 1979 regulations were challenged in the U.S. Court of Appeals and three provisions were invalidated (Natural Resources Defense Council, Inc. V. EPA. 656 F.2d 768 (D.C. Cir. 1981). The court struck down provisions prohibiting the issuance of waivers if the applicant was currently achieving secondary treatment, for discharges receiving less than primary treatment and for the discharge of sludge.

Later in 1981, Congress amended Section 301(h) in several respects. The amendments extended eligibility to apply to all POTWs discharging into marine or estuarine waters, and set the submission deadline at December 29, 1982. POTWs achieving secondary treatment could apply to discharge wastewater at less than secondary treatment levels, but waivers for sludge discharge were prohibited. Applications to discharge at less than primary treatment were not addressed and, thus, not prohibited.

Subsequently, EPA promulgated final and immediately effective amendments to the 1979 regulations to implement the statutory changes (47 FR 24918; June 8, 1982). At the same time, EPA published proposed amendments to the regulations (47 FR 24921). Those amendments became final on November 26, 1982 (47 FR 53666). EPA received 137 applications under the 1982 regulations (40 CFR 125).

As a result of this regulatory history, there remain certain procedural distinctions between 1979 and 1982 applications. Headquarters retains decision-making authority for the 30 larger 1979 applications under the 1982 regulations (large applicants are defined as those discharging at least five million gallons per day or serving a population of at least 50,000). The 40 smaller 1979 applications and all 1982 applications are assigned to the Regions for decision. In addition, all 1979 applications that are revised by the applicants as a result of the statutory changes are delegated to the Regions although concurrence by Headquarters on the decision is required. The 301(h) program is not delegable to states.

All 30 of Washington's 301(h) applicants discharge into Puget Sound or one of its tributaries. These applicants are listed in Table 3-1. All are currently achieving at least primary treatment and none propose to drop below this level of treatment. Of the 30 applications, 17 are pending from 1979, and 13 from 1982. Of these, the following seven discharge over five million gallons per day and are thus considered major applicants:

- 1979 applicants
    - Seattle Metro (West Point)
    - Tacoma (North End, Central)
- 1982 applicants
    - Bellingham (Post Point)
    - Edmonds
    - Everett
    - Seattle Metro (Alki).

TABLE 3-1

WASHINGTON STATE 301(h) APPLICANTS

- 1979 Applicants

  Anacortes (Main Point, Skyline)
  Clallam County (Clallam Bay, Sekiu)
  Coupeville
  Hartstene Point
  Langley
  Lynnwood
  Mukilteo
  Penn Cove Sewer District
  Port Angeles
  Seattle Metro (Duwamish, Richmond Beach, West Point)
  Steilacoom
  Tacoma (Central, North End, Western Slopes)
  Westside Water District

- 1982 Applicants

  Bellingham (Post Point)
  Des Moines Sewer District
  Edmonds
  Everett
  Kitsap County (Manchester)
  Lakehaven Sewer District (Lakota, Redondo)
  Port Townsend
  Seattle Metro (Alki, Carkeek)
  Skagit County Sewer District #1 (La Conner)
  Southwest Suburban Sewer District (Miller Creek, Salmon Creek)

The location of the major applicants is indicated in Figure 3-1. Originally, there were 19 1979 applications, but Coupeville withdrew its application and Seattle Metro Duwamish was denied.

The following sections describe the Regional decision-making process and obstacles to that process.

3.1 THE DECISION-MAKING PROCESS

This section identifies the Federal, State and local agencies involved in 301(h) decisions for Puget Sound POTWs, and describes the nature of their involvement. It outlines the decision-making process, the timing of the process and the criteria that must be met. Coordination among agencies and public input are also discussed.

3.1.1 The Agencies Involved

Federal agencies involved in the 301(h) permitting process include EPA Region X, and the regional offices of the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS). EPA is the permitting authority. NMFS and FWS review applications for compliance with the Endangered Species Act, 16 U.S.C. 1531 et. seq.

On the State level, the Washington Department of Ecology (WDOE) is responsible for determining whether a 301(h) proposal complies with State law, including water quality standards and the coastal zone management plan, and whether any other discharger would be required to increase treatment if the proposal were granted. WDOE may absolutely veto any application on those grounds.

If an applicant proposes changes to its outfall location and diffuser design, necessitating construction, the Washington Departments of Fisheries, Game, and Natural Resources and the local shoreline management agency will also be involved, as may the U.S. Army Corps of Engineers.

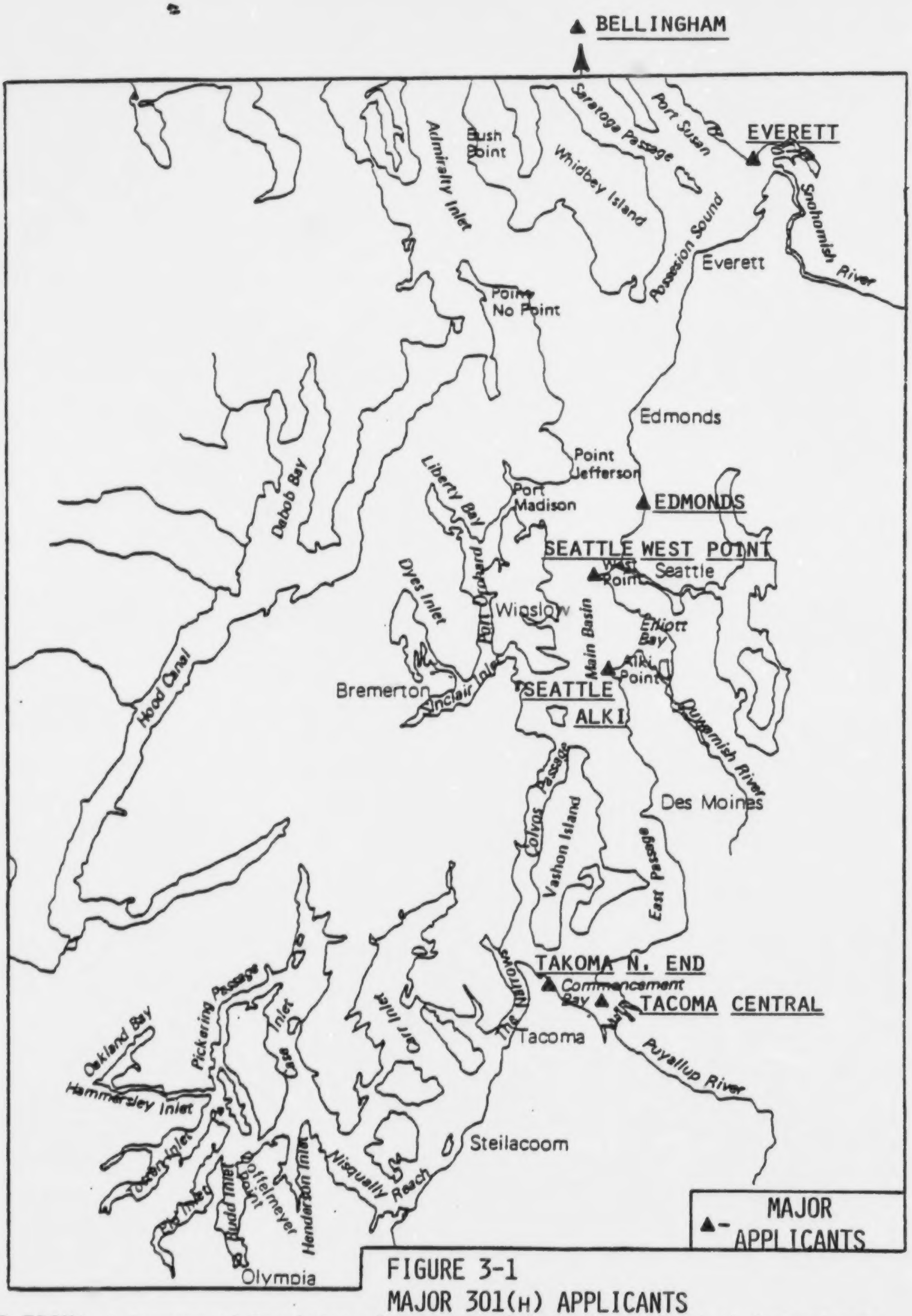

BELLINGHAM
EVERETT
Saratoga Passage
Port Susan
Admiralty Inlet
Bush Point
Whidbey Island
Possession Sound
Snohomish River
Everett
Point No Point
Edmonds
Point Jefferson
EDMONDS
Port Madison
Liberty Bay
Dabob Bay
SEATTLE WEST POINT
West Point
Seattle
Dyes Inlet
Port Orchard
Winslow
Main Basin
Elliott Bay
Alki Point
Bremerton
Sinclair Inlet
SEATTLE ALKI
Hood Canal
Duwamish River
Colvos Passage
Vashon Island
Des Moines
East Passage
The Narrows
TAKOMA N. END
Commencement Bay
TACOMA CENTRAL
Tacoma
Puyallup River
Carr Inlet
Case Inlet
Pickering Passage
Oakland Bay
Hammersley Inlet
Totten Inlet
Eld Inlet
Budd Inlet
Hoffelmeyer Point
Henderson Inlet
Nisqually Reach
Steilacoom
Olympia
▲- MAJOR APPLICANTS

FIGURE 3-1
MAJOR 301(H) APPLICANTS

ADAPTED FROM: A Summary of Knowledge of Puget Sound Related to Chemical Contaminants NOAA Technical Memorandum OMPA-13. 1981.

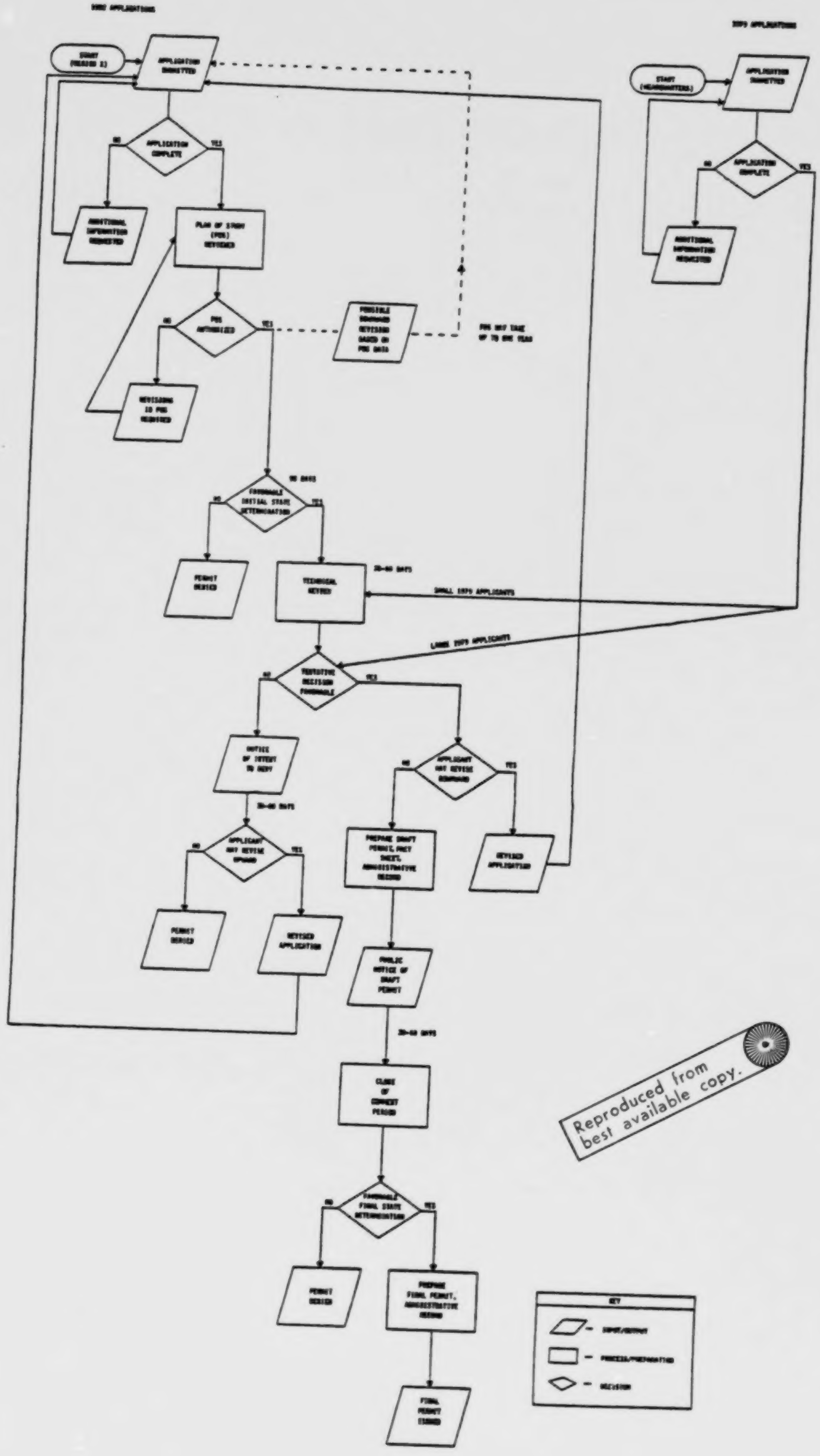
The next section describes EPA Region X's decision-making process. The roles of other agencies are discussed in Section 3.1.3.

3.1.2 Procedures, Timing and Criteria

As the simplified flow chart in Figure 3-2 indicates, the current decision-making process at Region X is initiated by receipt of an application. A complete 1979 application from a small discharger, forwarded from EPA headquarters, proceeds directly to technical review. Major 1979 applications reviewed by EPA headquarters that receive favorable tentative decisions are forwarded to the Region for draft permit preparation. A 1982 application does not receive a technical review until a plan of study is authorized and completed (if required), and WDOE issues a favorable tentative determination on compliance with State law and impact on other dischargers.

A 1979 application receives a State determination at the final permit stage, after Region X or EPA headquarters has reached a favorable tentative decision. The 1982 regulations require a tentative State determination before the Region will evaluate the application. If WDOE's tentative determination is negative, the application will be denied unless revisions that satisfy State concerns are possible.(65A) After a favorable tentative decision by Region X, the final State determination on 1982 applications occurs.

The plan of study is also an innovation of the 1982 regulations. Where time did not permit an applicant to supply all information required by the submission deadline, the Region may require or authorize submission of additional information following receipt of an application. If the missing information concerns discharge characteristics, water quality, biological conditions or oceanographic characteristics, the applicant will be required to submit a plan of study for collection of the data. A plan of study is required only when an applicant seeks to submit information after it has submitted its application. Completion of a plan of study may take up to one year. Where the data engendered by a plan of study supports changes in proposed treatment levels and/or outfall location and diffuser design, a revised application may be submitted with the data collection results.


1982 APPLICATIONS
START (REGION X)
APPLICATION SUBMITTED
APPLICATION COMPLETE
NO
YES
ADDITIONAL INFORMATION REQUESTED
PLAN OF STUDY (POS) REVIEWED
POS AUTHORIZED
NO
YES
POSSIBLE SUBSEQUENT REVISIONS BASED ON POS DATA
POS MAY TAKE UP TO ONE YEAR
REVISIONS TO POS REQUIRED
90 DAYS
FAVORABLE INITIAL STATE DETERMINATION
NO
YES
PERMIT DENIED
TECHNICAL REVIEW
30-60 DAYS
SMALL 1979 APPLICANTS
LARGE 1979 APPLICANTS
TENTATIVE DECISION FAVORABLE
NO
YES
NOTICE OF INTENT TO DENY
30-60 DAYS
APPLICANT MAY REVISE UPWARD
NO
YES
PERMIT DENIED
REVISED APPLICATION
APPLICANT MAY REVISE DOWNWARD
NO
YES
PREPARE DRAFT PERMIT, FACT SHEET, ADMINISTRATIVE RECORD
REVISED APPLICATION
PUBLIC NOTICE OF DRAFT PERMIT
30-60 DAYS
CLOSE OF COMMENT PERIOD
FAVORABLE FINAL STATE DETERMINATION
NO
YES
PERMIT DENIED
PREPARE FINAL PERMIT, ADMINISTRATIVE RECORD
FINAL PERMIT ISSUED
1979 APPLICATIONS
START (HEADQUARTERS)
APPLICATION SUBMITTED
APPLICATION COMPLETE
NO
YES
ADDITIONAL INFORMATION REQUESTED
KEY
INPUT/OUTPUT
PROCESS/PREPARATION
DECISION

Reproduced from best available copy.

FIGURE 3-2
301(h) PERMIT PROCESSING

The technical review involves analysis of the data submitted to determine whether the criteria are met. Section 301(h) requires the applicant to demonstrate that:

(1) there is an applicable water quality standard specific to the pollutant for which the modification is requested, which has been identified under section 304(a)(6) of this act;

(2) such modified requirements will not interfere with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife, and allows recreational activities, in and on the water;

(3) the applicant has established a system for monitoring the impact of such discharge on a representative sample of aquatic biota, to the extent practicable;

(4) such modified requirements will not result in any additional requirements on any other point or nonpoint source;

(5) all applicable pretreatment requirements for sources introducing waste into such treatment works will be enforced;

(6) to the extent practicable, the applicant has established a schedule of activities designed to eliminate the entrance of toxic pollutants from nonindustrial sources into such treatment works;

(7) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume specified in the permit.

The information necessary to determine if the criteria are met is required to be furnished with the application.

The technical evaluation of the application may be conducted by Region X, or by a contractor. In either case, the evaluation is reviewed within the Region by the Water and Environmental Services Divisions. The Technical Support Team of the Environmental Services Division's Field Operations and Technical Support Branch provides input on receiving water circulation and quality. The Ocean Programs Team of the Water Division's Permits and Compliance Branch conducts the remainder of the review. The Water Team in the Office of Regional Counsel reviews permit terms and conditions. An organizational chart of Region X is contained in Figure 3-3. An evaluation generally takes from one to two months to complete, although there is no formal time limit for completion.(66A)

Following the technical review and tentative decision, 1979 applicants may revise their applications to propose changes to treatment levels and/or outfall and diffuser location and design. A letter of intent to revise must be sent to EPA within 45 days of EPA's tentative decision on the original application or within 45 days of promulgation of the 1982 regulations, whichever is later. A revised 1979 application must be submitted within one year of EPA's tentative decision on the original application or within one year of promulgation of the 1982 regulations, whichever is later.

Revised 1979 applications are treated as new or 1982 applications. Thus, State determination is required prior to technical review of the revised application, and a plan of study may be authorized or requested. If a plan of study is authorized, an additional revision is possible if the study data supports changes in proposed treatment levels and/or outfall location and diffuser design.

A 1982 applicant may also revise its application following the tentative decision to propose changes to treatment levels and/or outfall and diffuser location and design. Revisions which increase pollutant loads (i.e., downward revisions) must be justified by substantial changes in circumstances beyond the applicant's control since submission, because 1982 applicants could have proposed any level of treatment in their submission.

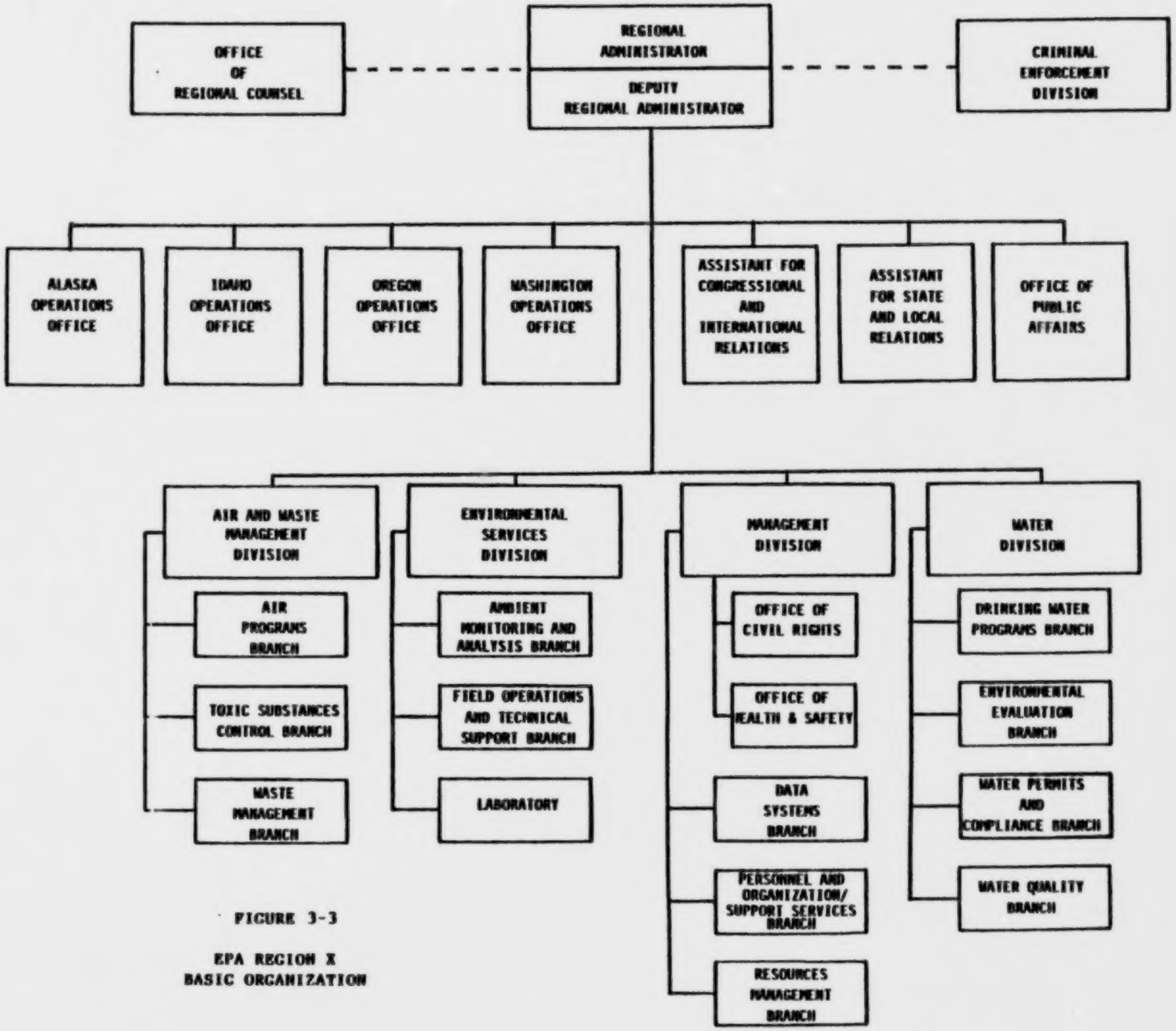

OFFICE OF REGIONAL COUNSEL
REGIONAL ADMINISTRATOR
DEPUTY REGIONAL ADMINISTRATOR
CRIMINAL ENFORCEMENT DIVISION
ALASKA OPERATIONS OFFICE
IDAHO OPERATIONS OFFICE
OREGON OPERATIONS OFFICE
WASHINGTON OPERATIONS OFFICE
ASSISTANT FOR CONGRESSIONAL AND INTERNATIONAL RELATIONS
ASSISTANT FOR STATE AND LOCAL RELATIONS
OFFICE OF PUBLIC AFFAIRS
AIR AND WASTE MANAGEMENT DIVISION
AIR PROGRAMS BRANCH
TOXIC SUBSTANCES CONTROL BRANCH
WASTE MANAGEMENT BRANCH
ENVIRONMENTAL SERVICES DIVISION
AMBIENT MONITORING AND ANALYSIS BRANCH
FIELD OPERATIONS AND TECHNICAL SUPPORT BRANCH
LABORATORY
MANAGEMENT DIVISION
OFFICE OF CIVIL RIGHTS
OFFICE OF HEALTH & SAFETY
DATA SYSTEMS BRANCH
PERSONNEL AND ORGANIZATION/ SUPPORT SERVICES BRANCH
RESOURCES MANAGEMENT BRANCH
WATER DIVISION
DRINKING WATER PROGRAMS BRANCH
ENVIRONMENTAL EVALUATION BRANCH
WATER PERMITS AND COMPLIANCE BRANCH
WATER QUALITY BRANCH

FIGURE 3-3

EPA REGION X
BASIC ORGANIZATION

Thus, if a tentative decision is unfavorable, any applicant may make revisions which reduce pollutant discharges (i.e., upward revisions). If a tentative decision is favorable, 1979 applicants may revise downward. Downward revision for 1982 applicants is possible only if substantial changes in circumstances are demonstrated. A revised application is treated as a new application.

Following a favorable tentative decision, a draft permit, fact sheet and administrative record are prepared by Region X, as required by the NPDES procedural regulations at 40 CFR 124. The draft permit contains effluent limitations, biological, water quality and effluent monitoring requirements and, if required, a pretreatment program schedule. A pretreatment program is required if an applicant has known or suspected industrial sources of toxic pollutants. A program is not required of applicants that certify no known or suspected industrial sources of toxic pollutants or pesticides.

The fact sheet describes the facility that is the subject of the draft permit and the type and quantity of pollutants proposed to be discharged. The basis for permit conditions is summarized, including the calculation of effluent limitations, and the reasons justifying the waiver are set forth. The procedures for reaching a final decision are described, including the beginning and end of the public comment period, and procedures for requesting a hearing. The fact sheet also provides the name and telephone number of a person to contact for additional information.

The administrative record for a draft permit includes the application and any supporting data furnished by the applicant, the draft permit, the fact sheet, and all documents cited in the fact sheet (unless such material is readily available at the Region or is published material generally available).

If a tentative decision is unfavorable, the administrative record includes a notice of intent to deny the application rather than a draft permit. If the Region's final decision is that the tentative decision to deny was incorrect, the notice of intent to deny is withdrawn and a draft permit is prepared.

Public notice of a draft permit or of intent to deny an application must be given, and at least 30 days for public comment must be allowed. Notice requirements are described in Section 3.1.4.

Following public notice, WDOE must concur if a favorable final determination is to ensue. For 1979 applicants that do not revise their applications, the first and only State determination occurs at this point. For 1982 applicants and 1979 applicants that revise their applications, this is the second and final State concurrence.

A final decision to issue or deny a waiver is made after the close of the public comment period. Notice is sent to the applicant and to everyone who submitted written comments or requested notice of the final permit decision. The notice must make reference to procedures for contesting the decision. The decision becomes effective 30 days after service of notice unless a later date is specified. If no changes in the draft permit were requested in comments, the permit becomes effective immediately upon issuance.

A response to public comments must be issued with the final decision. Any provisions of the draft permit that have been changed must be specified as well as the reasons for the change. All significant comments must be described and responded to. Any documents cited in the response must be included in the administrative record for the final decision. The response is available to the public.

The administrative record for the final decision consists of the record for the draft permit, all public comments, the tape or transcript of any hearing and any written material submitted at a hearing. As noted, the response to comments and any new material must be included. The final permit is also included.

3.1.3 Coordination With Other Agencies

This section describes the roles of agencies other than Region X in the 301(h) decision-making process. The responsibilities of those agencies that will be involved in every 301(h) decision are described first. This section then outlines the roles of agencies that will be involved only if construction is proposed in a 301(h) application.

3.1.3.1 Washington Department of Ecology (WDOE)

WDOE, located in Olympia, is the State equivalent of EPA. A 301(h) waiver cannot be granted by EPA unless WDOE certifies that the proposal:

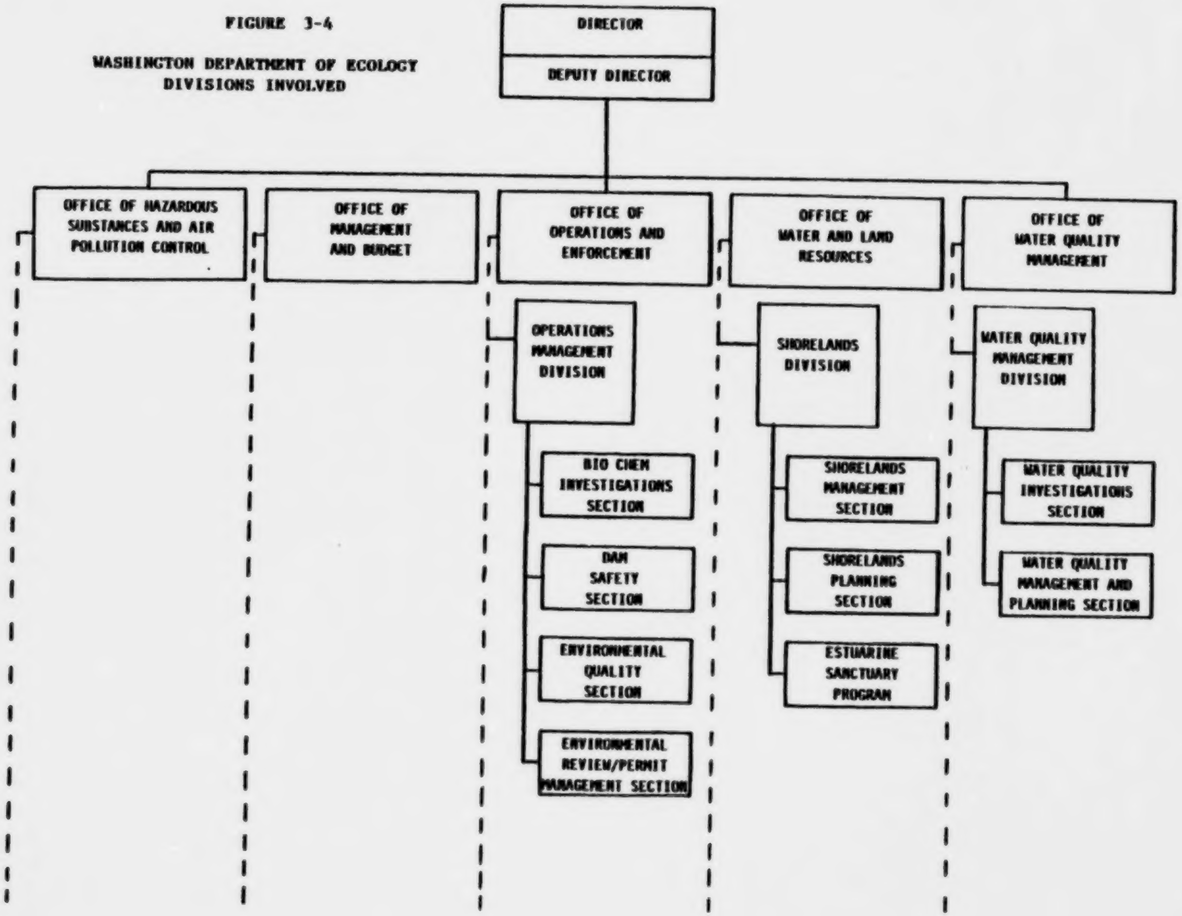
- Complies with State law, including water quality standards and the coastal zone management plan, and
- Will not result in additional pollution control requirements on any other point or nonpoint sources.

The Water Quality Management and Planning Section of WDOE's Water Quality Management Division in the Office of Water is responsible for 301(h) policy development and coordinates the review process. It also conducts an overall technical review in conjunction with the Regional Offices. The monitoring component of the application is reviewed by the Water Quality Investigations Section of the Water Quality Management Division. The Environmental Quality Section of the Operations Management Division in the Office of Operations and Enforcement reviews water quality aspects of the application. Consistency with the State's coastal zone management plan is determined by the Shorelands Management Section of the Shorelands Division in the Office of Land and Water Resources.(66F) Normally, 90 days are allotted for review, although extensions may be granted by Region X upon request. Figure 3-4 is an organizational chart of WDOE divisions and the sections involved.

As evaluation criteria, WDOE uses the State water quality standards, WAC 173-201, and criteria for sewage works design, WAC 173-240, and EPA's 301(h) regulations, 40 CFR 125. The State must specify any conditions required by State law in the certification. The final permit must incorporate such conditions. For 1979 applications, WDOE relies on EPA's technical review documents and administrative record to reach its determination.(66F) Such reliance will not be possible for the early determination required on 1982 applications and revised 1979 applications.

FIGURE 3-4

WASHINGTON DEPARTMENT OF ECOLOGY DIVISIONS INVOLVED


DIRECTOR
DEPUTY DIRECTOR
OFFICE OF HAZARDOUS SUBSTANCES AND AIR POLLUTION CONTROL
OFFICE OF MANAGEMENT AND BUDGET
OFFICE OF OPERATIONS AND ENFORCEMENT
OPERATIONS MANAGEMENT DIVISION
BIO CHEM INVESTIGATIONS SECTION
DAM SAFETY SECTION
ENVIRONMENTAL QUALITY SECTION
ENVIRONMENTAL REVIEW/PERMIT MANAGEMENT SECTION
OFFICE OF WATER AND LAND RESOURCES
SHORELANDS DIVISION
SHORELANDS MANAGEMENT SECTION
SHORELANDS PLANNING SECTION
ESTUARINE SANCTUARY PROGRAM
OFFICE OF WATER QUALITY MANAGEMENT
WATER QUALITY MANAGEMENT DIVISION
WATER QUALITY INVESTIGATIONS SECTION
WATER QUALITY MANAGEMENT AND PLANNING SECTION

3.1.3.2 National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (FWS)

In its technical review, Region X must determine whether a 301(h) proposal complies with Endangered Species Act 16 U.S.C. 1531 et. seq. A proposal must comply for a favorable tentative decision to be reached.

The Region sends its tentative decision to the local offices of NMFS and FWS as part of the public notice process. An explanation of the finding of no threat to endangered species or their critical habitats is included. At least 30 days are available for review. NMFS and FWS must concur in the determination for the decision-making process to proceed. Otherwise, the process halts while further studies are conducted.(66A)

In addition to their endangered species review, NMFS and FWS may propose that special conditions be included in a permit to avoid substantial impairment of fish, shellfish or wildlife resources. The Region has discretion on the inclusion of such recommended conditions.(15)

3.1.3.3 Washington Departments of Fisheries (WDF) and Game (WDG)

If an application proposes changes to the outfall and diffuser location or design necessitating construction, WDF and WDG are sure to be involved. They could comment in any case, and propose permit conditions to protect fish and wildlife, but if an application proposes construction, the construction cannot take place without an hydraulic project approval (HPA) (WAC 220-110). However, according to WDOE, the HPA process is not part of the 301(h) certification and concurrence process. The HPA process might occur simultaneously with the certification and concurrence process or later, even after a waiver is granted. WDOE would also have to approve any construction. Thus, the State distinguishes waiver approval from construction approval.(66F)

Hydraulic projects are defined as any construction or other work that will use, divert, obstruct or change the natural flow or bed of any river or stream, or that will utilize any of the waters of the State, or materials from the stream beds. Hydraulic projects may not take place unless an HPA is granted.(55)

The purpose of the HPA is to protect fish. The program is jointly administered by WDF and WDG. WDF has jurisdiction over non-game fish and WDG has jurisidiction over game fish.(65H)

Processing time is generally less than 30 days unless a site visit or further information is required. The HPA may contain such general, technical and special provisions as are necessary to protect fishery resources. An HPA will be denied only if the proposal is determined to be directly or indirectly harmful to fish life and adequate protection, mitigation or restoration cannot be assured.(55)

3.1.3.4 Washington Department of Natural Resources (DNR)

DNR manages State lands, including certain aquatic submerged lands. It requires a lease for the land involved in operation of waste outfalls. Under WAC 332-30-125(7), the rent is based on the fair market value of land used plus the actual value of quantifiable public resource elements being withdrawn. The amount of land used by an outfall depends on the type and volume of waste discharged, the type of treatment the waste receives and the type of outfall. The value of resources withdrawn depends on the size of the area affected, and the number and economic value of natural resources affected. If a 301(h) application proposes outfall construction, that alteration may be reflected in an adjustment of the current annual rental.(54)

3.1.3.5 U.S. Army Corps of Engineers

Although the Corps may review and comment upon any 301(h) application, and always receives notice of draft permits, it is most likely to take an active role if an application proposes construction because of its responsibilities in the areas of navigation and anchorage. If the Corps Seattle district engineer determines that navigation or anchorage would be substantially impaired if the permit is granted, the permit must be denied. If the Seattle district engineer advises the Region that certain conditions in the permit are necessary to avoid substantial impairment of navigation or anchorage, the Region must include the conditions in the permit (40 CFR 124).

3.1.3.6 Local Shoreline Management Agencies

The State Shoreline Management Act (SMA), RCW 90.58, grants 23 cities and 15 counties the authority to regulate activities within their jurisdiction that take place on State submerged lands. Such activities must conform to local master plans that contain goals, policies, environmental zoning designations and specific use regulations. SMA is the basis for the State's coastal zone management plan.(59)

Any alteration of an outfall's location or design is an activity that might require a local SMA permit. The issuance of local permits is governed by the locally developed master plan. An outfall alteration may require a substantial development or conditional use permit or a variance, depending upon the specific use regulations of the local plan.

An environmental checklist must be submitted with the permit application. On the basis of that checklist, the local agency will decide whether an environmental impact statement (EIS) is required under the State Environmental Policy Act (SEPA), RCW 43.21C. This process is discussed further in Section 3.1.5.

The applicant must publish notice in the local newspaper twice, a week apart, upon filing for a permit. No action may be taken by the local agency for 30 days. When final action is taken, the applicant, WDOE and the State attorney general must be notified. The applicant and all interested parties in disagreement with the final action have 30 days to request certification of review from WDOE. If a permit is approved without appeal, the applicant may proceed 45 days after WDOE receives notice of final action.(57,59)

3.1.4 Public Input

Region X must issue public notice of a draft 301(h) permit or of intent to deny an application. Under 40 CFR 124, at least 30 days for public comments must be allowed. Notice must be mailed to all interested parties, including other agencies with jurisdiction over some aspect of the application. Notice is sent to the applicant, WDOE, WDF, WDG, NMFS, FWS, the Corps, DNR, the Advisory Council on Historic Preservation, any other appropriate government authorities and other interested parties. For major permits, notice must be published in a daily or weekly newspaper within the affected area. Press releases may also be utilized.

A public notice must identify the applicant and its location, the office processing the permit and someone from whom additional information may be obtained. The nature of the waiver must be described and the times when the administrative record is available for public inspection. Comment procedures and procedures to request a hearing must be described. A copy of the fact sheet, application and draft permit must be sent along with the notice to the parties named in the previous paragraph. The Regional Administrator may hold a public hearing at her discretion.

Public notice must also be given by WDOE of receipt of applications for water quality certification. Notice is mailed to all interested and appropriate persons and organizations. The comment period is 20 days. Public hearings are not mandatory.(56)

3.1.5 Environmental Impact Statement (EIS)

Although an EIS under the National Environmental Policy Act (NEPA), 42 U.S.C. 4321 et. seq., is not required for 301(h) applications, an EIS under the State Environmental Policy Act (SEPA), RCW 43.21C, may be required if the application proposes changes to the outfall location and diffuser design requiring construction. An EIS under SEPA would not be required if construction is not proposed because, in the case of Puget Sound, 301(h) waivers have the effect of maintaining the status quo.

An EIS under SEPA is required if a proposed activity may have a substantial adverse effect on the quality of the environment. The need for an EIS is determined by the lead agency on the basis of a standard State-wide environmental checklist (included in Appendix B) completed by the applicant when applying for a State or local permit. The lead agency in this case would be the local shoreline management agency if a permit is required under the local shoreline master plan. Cities and counties are always the lead agency unless the applicant is an agency, in which case the applicant is the lead agency.(13)

If an EIS is required, it may be prepared by the agency or by the applicant, depending on local regulations. The EIS must be issued for review to all State and Federal agencies with jurisdiction over the proposed action. Reviewing agencies have 35 days to respond.(13)

According to WDOE, the results of an EIS would not affect the State's water quality certification or its concurrence on a 301(h) application. Like the hydraulic project approval required for outfall construction (discussed in Section 3.1.3.3), the EIS on construction, if required, would be considered a separate process from certification and concurrence.(66F)

3.2 OBSTACLES TO DECISION-MAKING

This section describes the technical, administrative and statutory or regulatory obstacles to the 301(h) decision process.

3.2.1 Technical Obstacles

WDOE and Region X agree that lack of data on which to base decisions is the primary technical obstacle to decision-making. Although enough is known that the agencies feel comfortable granting waivers, particularly because a waiver decision generally maintains the status quo and may improve it via the monitoring programs, a better understanding of the limits of the Sound's assimilative capacity for various pollutants and the cumulative impact of discharges is necessary. Further data on circulation and exposure fields in water columns would be useful, as would benthic testing standards that link loadings with biological availability and toxicity. Further research to define the contaminants of concern in an estuarine ecosystem is also needed. Overall, criteria that specify how much impact is too much are necessary for informed and consistent decision-making. Information generated by the plans of study will be useful, but water quality standards for priority pollutants and sediment criteria are still needed for informed decision-making.

3.2.2 Administrative Obstacles

Incomplete applications that cause delay and lack of sufficient processing personnel are cited as administrative obstacles by Region X. The major problem in this area, however, is considered to be lack of sufficiently trained professionals to conduct the technical reviews.(66A)

An administrative problem with technical overtones anticipated by WDOE pertains to the early State determination required for 1982 and revised 1979 applications. For 1979 applications, WDOE may rely on the information and determinations of EPA's technical review, but such reliance will not be possible for the early State determinations on 1982 and revised 1979 applications. Delays are foreseen while further information is sought and the expertise of additional personnel is drawn upon.(66F)

Another possible problem has to do with major and revised 1979 applications. Because EPA headquarters was originally responsible for all 1979 applications, it must concur on the final permit. Concurrence may be a problem for Region X because all the terms and conditions of the permit have been negotiated at that stage. If headquarters insists on changes in the terms and conditions, Region X's position may be hampered by applicants' knowledge that it does not have the last word.(66A) Thus far, headquarters' Office of Marine Discharge Evaluation has always concurred.

3.2.3 Statutory Obstacles

There has been great uncertainty at present about whether there will be a 301(h) program in Washington. State law requires best practicable treatment; all known, available and reasonable treatment technology must be utilized. That provision has been interpreted to require secondary treatment, thus foreclosing the availability of 301(h) waivers. The issue arose in December

1982 when the first proposed final permit was sent to WDOE for certification and concurrence.(66A)

Legislation authorizing the State to participate in the 301(h) program was introduced in the last session of the legislature but was not reported out of committee. The Senate Parks and Ecology Committee is conducting an informal study of the issues involved. The bill will still be alive when the legislature reconvenes in January, 1984. However, WDOE has now adopted a position of nonadvocacy in the belief that lobbying efforts should be led by the communities that will be forced to finance secondary treatment should the bill fail. At this point, the bill is opposed by certain legislators representing districts that border the Sound on water quality grounds, and supported by POTWs like Seattle Metro on economic and environmental grounds.(66F)

An attorney general's opinion on the issue indicates that whether the State has authority to participate in the program depends on WDOE's interpretation of the phrase "all known, available and reasonable methods" in relation to treatment technology and the circumstances surrounding each applicant. Water quality would not be a factor in such an interpretation because the requirements are technology-based. As State law does not expressly require secondary treatment, WDOE may have to determine on a case-by-case basis whether secondary treatment is "available and reasonable" under the particular circumstances.

3.3 CONCLUSIONS

In theory, the key agencies in the 301(h) decision-making process are Region X and WDOE, and the key decisions are the Region's tentative decision and WDOE's certification and concurrence. Due to uncertainty about the State's authority to participate in the program, however, the key actors at this time are WDOE, the legislators and affected communities.

Because the process in Washington State has not progressed beyond the first 1979 application being sent by Region X to WDOE for certification, overall conclusions on coordination of the decision-making process are not possible. Although WDOE has not reviewed an application, review responsibilities have been defined and a 301(h) permit coordinator appointed. Processing within the Region is well defined and understood, although constrained by lack of resources. Region X is acknowledged to be a leader in 301(h) program development and is consulted by other Regions on various issues. For the time being, limited Regional resources have shifted away from review of Washington applications, toward review of Alaska applications.

Even with the uncertainty about the 301(h) program, 1982 Washington applicants are proceeding with their plans of study. The Region expects to receive all completed applications within the next year.(66A) Whether there will be a 301(h) program in Washington at that time is unknown.

4. CLEAN WATER ACT SECTION 404 PERMITS

The Clean Water Act (CWA), 33 U.S.C. 1251 et seq., prohibits disposal of dredged or fill material in waters of the United States except in compliance with Section 404. Section 404(a) authorizes the Secretary of the Army, acting through the Corps of Engineers, to issue permits for the discharge of dredged or fill material into waters of the United States at specified disposal sites. Disposal sites are specified through application by the Corps of EPA guidelines.

The guidelines, authorized by Section 404(b)(1), and developed by EPA in conjunction with the Secretary of the Army, are contained in 40 CFR 230. The guidelines apply to discharges of dredged or fill material to waters inside the baseline from which the territorial sea is measured, and to fill discharges (including dredged material disposed of for the purpose of fill) into the territorial sea. Puget Sound is located inside the baseline from which the territorial sea is measured. Discharges of dredged material into the territorial sea are regulated under the Marine Protection, Research, and Sanctuaries Act, 33 U.S.C. 1401 et seq.

The guidelines establish a presumption against discharge to waters unless it can be demonstrated that a discharge will not have an unacceptable adverse impact on the aquatic ecosystem either individually or in combination with impacts of other activities that affect ecosystems of concern. If a proposed discharge does not comply with the 404(b)(1) guidelines, the Corps may still issue a permit if it decides under Section 404(b)(2) that the economic impact on navigation and anchorage warrant issuance. The authority to issue permits for dredged or fill material discharge is delegated to 36 district engineers. Corps procedures for permit issuance are contained in 33 CFR 320 et seq.

In addition to individual permits under Section 404(a), the Corps is authorized to issue general permits under Section 404(e) on a state, regional or nationwide basis. General permits cover categories of activities involving dredged or fill material disposal that are similar in nature, cause minimal adverse environmental effects when performed separately and have only minimal cumulative adverse effects on the environment. The activities specified in a general permit may take place without an individual permit. General permits may be issued for more than a five year term.

If certain conditions are met, Section 404 does not govern the discharge of dredged or fill material as part of the construction of a Federal project specifically authorized by Congress. Under Section 404(r), if an environmental impact statement containing information on the effects of the discharge is submitted to Congress prior to the discharge and prior to authorization of the project or appropriation of funds, then Section 404 does not apply. Still, an evaluation under the Section 404(b)(1) guidelines is included in the submittal. Section 5 of this report describes the regulatory decision-making process for a specific Section 404(r) project.

The sections immediately following describe the decision process for individual Section 404(a) permits to discharge dredged or fill material and the obstacles encountered in that process.

4.1 THE DECISION-MAKING PROCESS

This section discusses the procedures and criteria used by the Corps to process and evaluate 404 permit applications, and the timing of the process. This section also outlines the roles of other Federal, State and local agencies involved in decision-making and the opportunities for public input. The situations requiring environmental impact statements are described, obstacles to the decision process are discussed and conclusions are drawn.

4.1.1 The Agencies Involved

As noted, the U.S. Army Corps of Engineers is the issuing authority for permits to dispose of dredged or fill material in waters of the United States. In the Puget Sound area, this authority has been delegated to the Seattle District of the Corps. In conjunction with the Army, EPA develops the guidelines for specification of disposal sites and oversees delegation of State 404 programs. EPA Region X reviews permit applications, among other responsibilities. Other Federal reviewers include the National Marine Fisheries Service and the U.S. Fish and Wildlife Service.

On the State level, the Washington Department of Ecology (WDOE) reviews each application for water quality certification and coastal zone plan concurrence. It also coordinates the State review process and provides the formal State response. WDOE routinely sends 404 applications to seven agencies for review. These agencies are the Departments of Fisheries, Game, Natural Resources, Social and Health Services, and Transportation, the Parks and Recreation Commission and the Office of Archeology and Historic Preservation.

The appropriate local shoreline management agency also reviews 404 permit applications for consistency with the local shoreline master program. The local shoreline management agency may be a city or a county agency.

The next section describes the procedures, timing and criteria involved in the Corps' decision-making process. The roles of other agencies are discussed in Section 4.1.3.

4.1.2 Procedures, Timing and Criteria

The following discussion is based on Corps procedures contained in 33 CFR 320 *et. seq.* As the simplified flow chart in Figure 4-1 indicates, the formal process begins with the submission of an application for a permit to the Seattle District Corps office. If a major project is proposed, applicants are encouraged to consult with the Corps prior to submission of an application for advice on the type and quantity of information that may be required.

All activities reasonably related to the same project are included in a single permit application. For example, a single application may propose non-navigational dredging, which is permitted by the Corps under Section 10 of the Rivers and Harbors Act, as well as disposal of the dredged material, which may be governed by CWA Section 404 or Section 103 of the Marine Protection, Research and Sanctuaries Act. The same general procedures govern all Army permitting processes.

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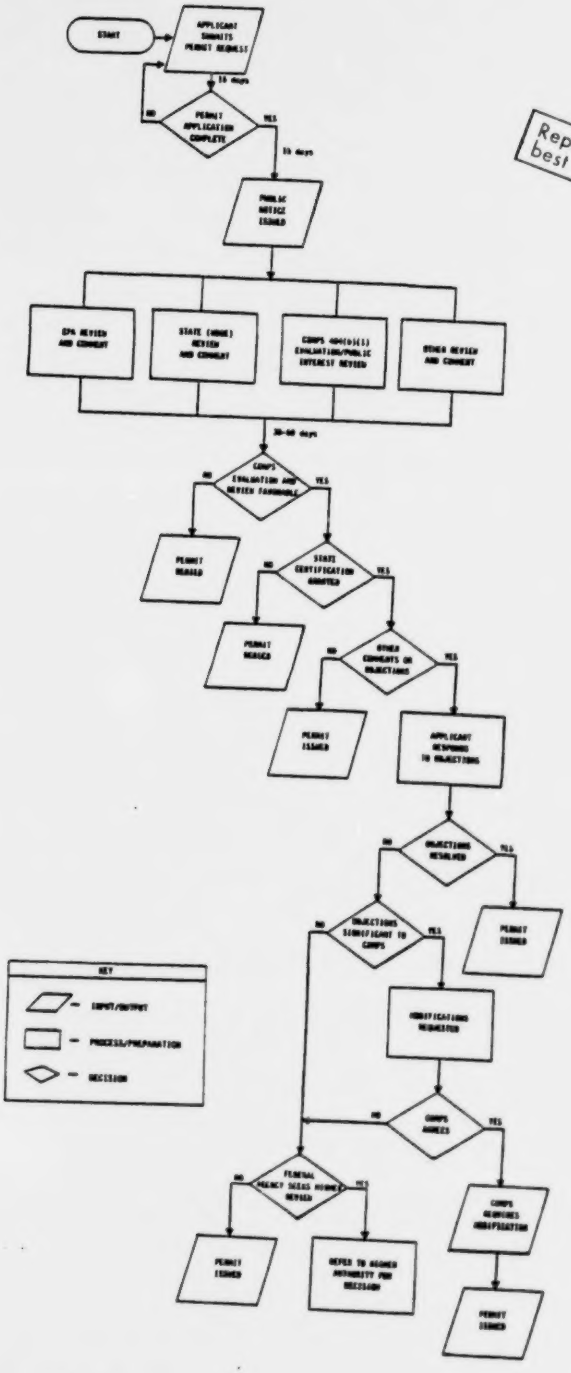
START
APPLICANT SUBMITS PERMIT REQUEST
15 days
PERMIT APPLICATION COMPLETE
NO
YES
15 days
PUBLIC NOTICE ISSUED
EPA REVIEW AND COMMENT
STATE REVIEW AND COMMENT
CORPS 404(b)(1) EVALUATION/PUBLIC INTEREST REVIEW
OTHER REVIEW AND COMMENT
30-60 days
CORPS EVALUATION AND REVIEW FAVORABLE
NO
YES
PERMIT DENIED
STATE CERTIFICATION GRANTED
NO
YES
PERMIT DENIED
OTHER COMMENTS OR OBJECTIONS
NO
YES
PERMIT ISSUED
APPLICANT RESPONDS TO OBJECTIONS
OBJECTIONS RESOLVED
NO
YES
PERMIT ISSUED
OBJECTIONS SIGNIFICANT TO CORPS
NO
YES
MODIFICATIONS REQUESTED
CORPS AGREES
NO
YES
FEDERAL AGENCY SEEKS HIGHER REVIEW
NO
YES
PERMIT ISSUED
REFER TO HIGHER AUTHORITY FOR DECISION
CORPS REQUIRES MODIFICATION
PERMIT ISSUED
KEY
- INPUT/OUTPUT
- PROCESS/PREPARATION
- DECISION

FIGURE 4-1

404 PERMIT PROCESSING

An application to discharge under 404 is reviewed for completeness within 15 days of receipt. The applicant must, among other things, describe the source of the material proposed to be discharged; its type, composition and quantity; the proposed method of transportation and disposal; and the location of the proposed disposal site. If the application is incomplete, additional information will be requested.

Within 15 days of receipt of all required information, public notice is issued. Thirty days are generally allowed for comment, although as few as 15 may be allowed. An additional 30 days for comment may be provided upon request. Comments must be considered and made part of the administrative record.

During the public comment period, the application is reviewed by the Corps. Complex cases are reviewed by the Environmental Resources Section of the Engineering Division's Planning Branch. Other cases are reviewed by the Permit Section of the Operations Division's Regulatory Functions Branch, which also coordinates the overall process and issues permits.(66Q) Figure 4-2 is an organizational chart of the Seattle District office.

The Corps conducts what is known as a public interest review. The public interest review balances favorable impacts against detrimental impacts, including cumulative impacts, to reflect national concerns for both the protection and utilization of important resources. Corps review also includes consideration of the 404(b)(1) guidelines developed by EPA. A permit must be denied if the proposed activity is not in the public interest or does not comply with the 404(b)(1) guidelines.

In the public interest review, the relative need for the proposed activity is considered. If there are unresolved conflicts about resource use, reasonable alternative discharge locations and methods are evaluated for practicability. In addition, the Corps considers the extent and permanence of beneficial or detrimental effects on public and private uses of the area.

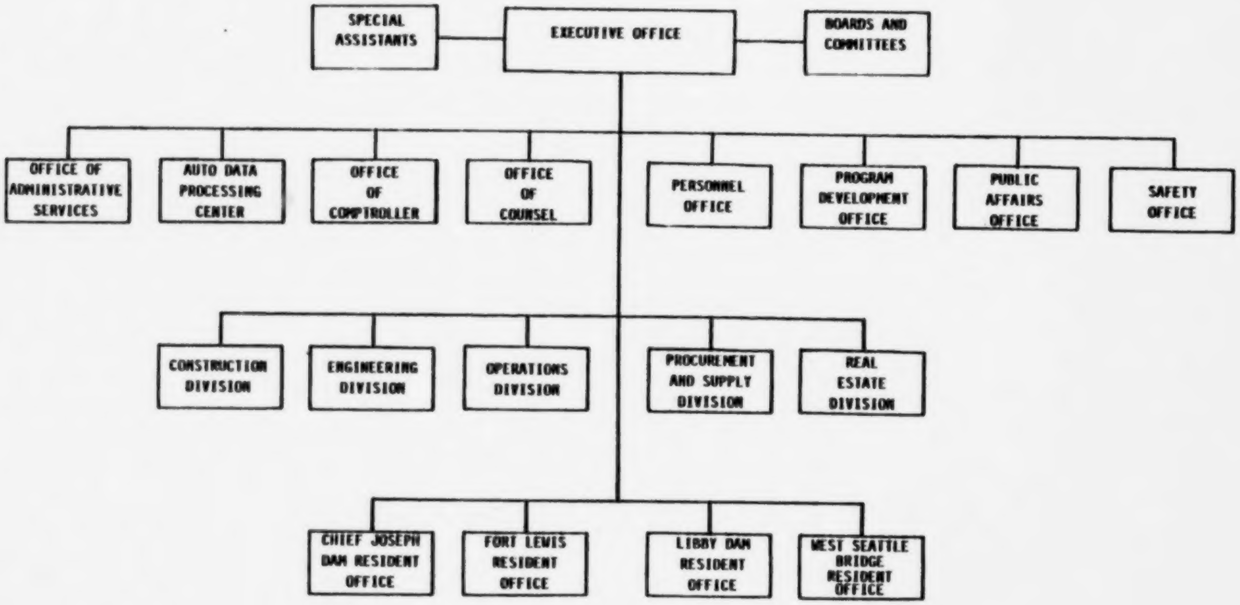
SPECIAL ASSISTANTS
EXECUTIVE OFFICE
BOARDS AND COMMITTEES
OFFICE OF ADMINISTRATIVE SERVICES
AUTO DATA PROCESSING CENTER
OFFICE OF COMPTROLLER
OFFICE OF COUNSEL
PERSONNEL OFFICE
PROGRAM DEVELOPMENT OFFICE
PUBLIC AFFAIRS OFFICE
SAFETY OFFICE
CONSTRUCTION DIVISION
ENGINEERING DIVISION
OPERATIONS DIVISION
PROCUREMENT AND SUPPLY DIVISION
REAL ESTATE DIVISION
CHIEF JOSEPH DAM RESIDENT OFFICE
FORT LEWIS RESIDENT OFFICE
LIBBY DAM RESIDENT OFFICE
WEST SEATTLE BRIDGE RESIDENT OFFICE

FIGURE 4-2

U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT, BASIC ORGANIZATION

Any impacts of dredged or fill material disposal in the following areas are balanced in the public interest review:

- Wetlands
- Fish and wildlife
- Water quality
- Historic, cultural, scenic and recreational values
- Interference with adjacent properties or water resource projects
- Coastal zone
- Marine sanctuaries
- Navigation
- Other Federal, State or local requirements.

The 404(b)(1) guidelines (40 CFR 230) establish certain conditions that must be met for a permit to issue. Under Section 230.10, a discharge must not be permitted if there is a practicable alternative that would have less impact on the aquatic ecosystem and that would not cause other significant environmental consequences. A proposed discharge must not cause or contribute to violations of applicable State water quality standards, violate applicable toxic effluent standards or prohibitions under CWA Section 307, jeopardize endangered or threatened species or their critical habitat, or violate any requirement imposed to protect a designated marine sanctuary. In addition, a discharge must not be permitted if it would cause or contribute to significant degradation of waters of the United States. All appropriate and practicable steps to minimize adverse impacts on the aquatic ecosystem must be taken.

To ensure compliance with the above conditions, the 404(b)(1) guidelines require consideration of the potential impact of the discharge on the physical, chemical and biological characteristics of the aquatic ecosystem, and on special aquatic sites and human use characteristics. The guidelines require a written factual determination on potential short- and long-term effects in the following areas:

- Physical substrate
- Water circulation, fluctuation and salinity

- Suspended particulate/turbidity
- Contaminants
- Aquatic ecosystem and organisms
- Proposed disposal site
- Cumulative effects
- Secondary effects.

These determinations are included by the Corps in a statement of findings (SOF) or record of decision (ROD), prepared after an environmental assessment. The SOF is prepared in cases where an environmental impact statement under the National Environmental Policy Act, 42 U.S.C. 4321 et seq., is not required. The ROD is prepared if an environmental impact statement is required. An SOF or ROD contains the district's public interest review and 404(b)(1) findings and conclusions. It is included in the administrative record prior to final action on the application. Final action is not taken until the public comment period has closed and the responses of other agencies and the public are received.

At the earliest possible time, the Corps provides the applicant with an opportunity to propose resolutions or rebuttals to any substantive negative comments from concerned parties. A final decision will not be made until objections are resolved. However, the Corps may issue a permit over objections that it deems insignificant, if no concerned Federal agency objects. Under CWA Section 404(q), Federal agencies that review 404 permit applications may request that a Corps decision to issue a permit over objections be reviewed by a higher authority. This review process is known as elevation.

A State water quality certification must be obtained from or waived by WDOE before a permit will be granted. The Corps assumes that the State has waived certification if no action is taken on a certification request within a period of 60 days. The district engineer may, as appropriate, extend or shorten this allowed time. Still, no extension may exceed one year.

WDOE must also concur that an application is consistent with the State coastal zone management plan before a permit will be issued. If the State objects or indicates that further review is necessary, a permit will not be issued until concurrence is given by WDOE or the Secretary of Commerce determines that the application is consistent with the Coastal Zone Management Act. If the State fails to concur or object within six months, concurrence is presumed.

Once the water quality certification and coastal zone concurrence are obtained, and a permit is deemed warranted on the basis of the administrative record, objections are resolved or rebutted. The district will determine the special permit conditions, if any, and permit duration. At this stage, prior to final action, the Corps staff may forward the application and administrative record to a higher Corps authority for decision. Such an elevation by Corps staff is most likely to occur in highly controversial cases.

If the district decides to deny the permit, the applicant is notified in writing of the dispositive reasons for the decision. If the final decision is to issue the permit, the Corps sends two copies of a draft permit to the applicant for signature. Signature indicates acceptance of permit conditions. Both copies of the draft permit must be returned to the district for signature by the issuing official. One copy is returned to the permittee. Final action is the signature of the issuing official on the permit or the signature on the letter notifying the applicant of denial.

The fee for a 404 permit is $100 if the ultimate purpose of the project is commercial or industrial in nature, and $10 if the project is non-commercial in nature. The fee is payable to the U.S. Treasury and due when the permit is issued.

4.1.3 Coordination with Other Agencies

This section describes the roles of other agencies in the 404 process, and how their evaluations are coordinated with the overall process. Federal, State and local agencies involved will be discussed in that order.

4.1.3.1 EPA

EPA has several roles to play in the 404 program. As administrator of the Clean Water Act, EPA establishes the scope and jurisdiction of the 404 program. As noted, the agency is responsible, in conjunction with the Secretary of the Army, for developing the 404(b)(1) guidelines for specification of disposal sites. EPA reviews individual permit applications, general permits and environmental impact statements, and has authority to restrict or prohibit use of a discharge site under CWA Section 404(c). In addition, EPA is responsible for approving and overseeing the delegation of State 404 programs under 404(g) and (h). States may apply for authority to issue dredged or fill material discharge permits for their "non-navigable" waters. "Non-navigable" waters are those waters which are not used for interstate or foreign commerce and which are not susceptible to such use. The State of Washington has reviewed its authority and determined that existing legislation is not sufficient to meet EPA requirements for establishment of a State 404 program. There are no plans at present to enact the required authorities.(39)

Acting through its regional offices, EPA reviews 404 applications forwarded by the Corps for comment as part of the Corps' public notice procedure. The Corps may issue a 404 permit even if EPA's determination of compliance with the guidelines is negative, after consultation on the objections. However, as noted, the statute establishes a procedure in Section 404(q) whereby EPA may elevate review of a permit if it objects to issuance of the permit as proposed. In addition, EPA is authorized by CWA Section 404(c) to prohibit or restrict specification of any area as a site if it determines that disposal will have an unacceptable adverse effect on shellfish beds and fishery areas, wildlife, municipal water supplies or recreational areas. This authority may be exercised in advance of a planned discharge, while a permit application is pending or even after issuance of a permit. Exercise of Section 404(c) authority is governed by procedures contained in 40 CFR 231. The decision is made by the Regional Administrator and reviewed by the Administrator prior to site restriction or prohibition.

Thus, EPA may block issuance of a discharge permit only by using CWA Section 404(c). The Corps may not override such action with the economics of navigation and anchorage determination of 404(b)(2) but may request a waiver from EPA on that basis. Region X has not yet exercised Section 404(c) authority.

Region X's evaluation of the consistency of 404 applications with the 404(b)(1) guidelines is conducted by the Water Division's Environmental Evaluation Branch, with support from the Environmental Services Division and the Air and Waste Management Division (see Figure 3-3). Most evaluations take less than a day to conduct, and in those cases all of the information needed for review is supplied in the public notice. In more complex cases, additional information and review time are likely to be required. The Region often coordinates requests for additional information with other reviewing agencies.(66J) There is a 30-day time limit on review. The Corps extends this review period for an additional 30 days upon request.

The primary concerns of the Region in the review of applications to discharge dredged material is the degree of contamination of the material and the nature of the proposed discharge site. The primary concern about fill disposal is loss of wetlands. Besides recommending denial, the Region can propose location or operation modifications to reduce environmental impacts. Mitigation to offset unavoidable impacts is coordinated with the applicant and, when appropriate, is required for permit approval.(66J) Although loss of wetlands due to permitted fill disposal is considered a serious issue, Federal and State personnel expressed more concern about dredged material disposal.

4.1.3.2 National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (FWS)

Under the Fish and Wildlife Coordination Act, 16 U.S.C. 661, et seq., any Federal agency that proposes to modify or control any body of water must first consult with NMFS, FSW and the head of the appropriate state agency. NMFS and FWS review 404 applications for compliance with the Endangered Species Act, 16 U.S.C. 1531 et seq. Applications are routinely routed to these agencies as part of Corps' public notice procedures. NMFS and FWS have the right to elevate proposed permits under Section 404(q).

In its initial review of an application, the Corps makes a finding about the proposed activity's impact on endangered species and their critical habitat. If it is determined that there will be no impact, a statement to that effect is included in the public notice. The notice sent to NMFS and FWS serves as a request for information on whether any listed species or any species proposed to be listed may be present in the area of the discharge.

If the Corps finds that the proposed activity may jeopardize an endangered species or adversely affect a critical habitat, formal consultation procedures with NMFS or FWS are initiated by including a statement to that effect in the public notice. An application must be denied if it cannot be modified so as to eliminate any threat to endangered species on their critical habitat.(66D)

4.1.3.3 Washington Department of Ecology (WDOE)

WDOE is the lead agency for the State on 404 applications. WDOE coordinates review by seven agencies, issues the State response and reviews applications for water quality certification and coastal zone concurrence. In addition to WDOE, 404 applications are reviewed by the Departments of Fisheries, Game, Natural Resources, Social and Health Services, and Transportation, the Parks and Recreation Commission and the Office of Archeology and Historic Preservation for issues within their various areas of jurisdiction. Any of these agencies may offer comments and objections, but only WDOE, WDF and WDG can stop a project.

WDOE can stop a project by denying water quality certification or coastal zone concurrence. WDF and WDG can stop a project by denying issuance of an hydraulic project approval (see Section 4.1.3.4). If other State reviewers voice objections that cannot be reconciled, WDOE must base the State response on its best judgment. Occasionally, projects are approved over objection. If agencies fail to comment within the allotted time without a legitimate reason, their right to comment is waived. The State response will recommend denial if HPA, water quality certification or coastal zone concurrence is denied. Denial is generally based on water quality grounds.(660)

The WDOE 404 permit coordinator in the Operations Management Division of the Office of Operations and Enforcement routes an application to reviewers and coordinates responses. Within WDOE, applications are reviewed by the Environmental Quality Section of the Operations Management Division in the Office of Operations and Enforcement, the Shorelands Management Section of the Shorelands Division in the Office of Land and Water Resources; and the Water Quality Management and Planning Section of the Water Quality Management Division in the Office of Water Quality Management (see Figure 3-4). In certain cases, WDOE regional personnel take part in the reviews. As review criteria, WDOE uses State water quality standards (WAC 173-201), Federal 404(b)(1) guidelines and other case-specific policies.(66M,O)

In some cases, the State requires more information than the applicant must furnish the Corps. Unless there is reason to believe contamination is present, the Corps does not require any analysis of sediment proposed to be dredged and discharged; the Corps only requires that the type and composition of sediment be specified. WDOE requires chemical analysis of sediment to be dredged when discharge is proposed whenever contamination is suspected. The State will specify how many core samples to take, at what depth each sample should be taken, and what substances should be analyzed in each sample. WDOE can require operation modifications and monitoring on projects where problems are suspected.(66O)

Conditions to the water quality certification or coastal zone concurrence required by WDOE are included in a 404 permit only if deemed essential by the Corps. The Corps encourages negotiation and execution of separate applicant/agency agreements containing all conditions thought necessary by those agencies. Although the Corps permit references separate agreements which bind an applicant, these agreements must be enforced by the signatory agencies.(66O)

4.1.3.4 Washington Departments of Fisheries (WDF) and Game (WDG)

WDF and WDG review 404 applications for conformance with hydraulic project rules, WAC 75.20.100, designed to protect fish life. WDF has jurisdiction over non-game fish, while WDG has jurisdiction over game fish. The agencies jointly administer the hydraulic project approval (HPA) program.

Hydraulic projects are defined as construction or other work that will use, divert, obstruct or change the natural flow or bed of any river or stream, or that will utilize any waters of the State, or materials from the stream beds. Every hydraulic project must have an hydraulic project approval.

The Corps public notice is deemed an application for a HPA. Processing time is generally within 30 days of receipt of an application, unless more information or a field evaluation is necessary. The HPA may contain such general, technical and special provisions as are deemed necessary to protect fishery resources. A HPA will be denied if a project is determined to be directly or indirectly harmful to fish life unless adequate protection, mitigation or restoration can be assured.(55) If the HPA is denied, WDOE will issue a negative State response and the 404 application must be denied.(66D)

Whether a HPA is required for the discharge of dredged material as distinguished from the dredging is a matter of interpretation that has not yet been clarified. Due to the fact that Corps procedure requires one application to include both dredging and the disposal of the dredged material, dredged material disposal is reviewed for HPA purposes along with dredging.(66E)

4.1.3.5 Washington Department of Natural Resources (DNR)

Among other responsibilities, DNR manages 1,300 miles of tidelands, 6,700 acres of constitutionally established harbor areas, and 2,000 square miles of marine beds of navigable waters. Tidelands, shorelands and beds of navigable waters may be leased by DNR to the general public.

The open water dredged material disposal sites in Puget Sound are managed and leased by DNR. DNR requires notice of an intended use five days prior to the use, if it is a first use, to allow an on-site visit with the discharger to confirm site location. Otherwise, notice is required 24 hours prior to use. There is a $300 minimum fee for use of a disposal site and an additional charge of ten cents per cubic yard if over 3,000 cubic yards are discharged. The Corps is not charged and other public agencies pay only the minimum fee. DNR will not lease use of a dredged material disposal site unless all required

Federal, State and local permits and authorizations have been granted to the discharger.(54)

DNR also charges a fee for dredging in State-owned beds of navigable waters, tidelands and shorelands. The removal of rock, gravel, sand and silt is considered a resource withdrawal. The fee is based on the fair market value of the land used plus the actual value of quantifiable public resource elements withdrawn. Public agencies are not charged.(54)

4.1.3.6 Local Shoreline Management Agencies

The Shoreline Management Act, RCW 90.58, is the basis for the State's coastal zone management plan. Among other things, it grants cities and counties the authority to regulate activities within their jurisdiction such as dredging, and discharge of dredged or fill material, that take place on State submerged lands within Puget Sound. As a result, applicants for 404 permits must obtain a local shoreline management permit from the city or county with jurisdiction over the area in which the proposed activity is to take place. It is important to note, however, that a local permit is issued for dredging or filling but not for open water disposal of dredged material. Local permits for dredged material disposal sites are sought and held by the State Department of Natural Resources. Recently, in the first case of its kind, the Mason County shoreline agency issued DNR a permit for an open water dredged disposal site that attempted to control the quality of material discharged to the site. The permit contained a condition that DNR notify the County of scheduled discharges so that the County could decide on a case-by-case basis whether discharge of the material would be allowed. Although the permit was vacated for other reasons, the State Shorelines Hearing Board found that the County has the right to attach special conditions to a disposal site permit to control the quality of the site.(58) The selection, authorization and management of open water dredged disposal sites are discussed at length in Section 6 of this report.

The local permitting process for approval of dredging or filling activities generally takes more time than the 404 process; the Corps advises applicants to begin the local process well in advance of the date the proposed activity is tentatively scheduled to begin.(66Q) The local permitting process takes place apart from the 404 process, but WDOE will take the local process into account when reviewing a 404 application for coastal zone consistency.(66U)

The local permitting process begins with an application and an environmental checklist. The environmental checklist is used to determine whether an environmental impact statement (EIS) is required under the State Environmental Policy Act, RCW 43.21C. Environmental impact statements are discussed in Section 4.1.5.

Upon submitting an application, the applicant must publish public notice in the local newspaper twice, with the notices appearing a week apart. During this time, within 15 days of submission of the application and checklist, the local agency determines whether an EIS under SEPA is required. If not, the local agency sends notice to that effect to other State or local agencies with jurisdiction over some aspect of the proposed activity. Those agencies have 15 days to review the finding.(59)

If an EIS under SEPA is not required, final action may be taken by the local agency 30 days after submission of the application, although there is no set time within which it must act. The applicant, WDOE and the State attorney general must be notified of final action. The applicant and all interested parties in disagreement with the final action have 30 days to seek certification of review from WDOE to appeal to the Shorelines Hearing Board. The Shorelines Hearing Board is an administrative appeal body created by the Shoreline Management Act. A Board decision may be appealed to Superior Court, as may any request for review not certified. If a permit is approved without appeal, the applicant may proceed with the proposed activity 45 days after WDOE receives notice of final action.(59)

4.1.4 Public Input

Public notice of a 404 application is issued by the Corps within 15 days after receipt from the applicant of all necessary information. Copies are posted in post offices or other public places in the vicinity of the site of the proposed activity and are sent to appropriate city and county officials, State and Federal agencies, adjoining property owners, concerned business and conservation organizations, the local news media and other interested parties.(16)

The notice must identify the applicant and where additional information may be obtained, and describe the nature and location of the proposed activity. A list of other government authorizations obtained or requested by the applicant must be included. The notice must state that any person may request that a public hearing be held. A description of the factors on which decisions are based is also included.(16)

Thirty days are generally allowed for public comment. At least 15, and as many as 60, days from the date of mailing may be allowed. Public hearings are held at the discretion of the district engineer. He may attempt to resolve informally any material issues raised in a hearing request, or set a time and place for a hearing. Requests for a hearing must be granted unless the district engineer determines that the issues raised are insubstantial. In cases of doubt, the presumption is in favor of a hearing.(16)

The notice required for State water quality certification is transmitted with the Corps notice. A standard WDOE form entitled "Notice of Application for Water Quality Certification" is included by the Corps in its public notice. Written comments received within 20 days of publication of notice are accepted.(56) Public notice is not required for a WDF/WDG hydraulic project approval or a DNR public lands lease.

4.1.5 Environmental Impact Statement (EIS)

An EIS under the National Environmental Policy Act (NEPA) or the State Environmental Policy Act (SEPA) may be required. An EIS under NEPA is required for major Federal actions that may significantly affect the quality of the environment. As discussed in Section 5 of this report, the 404(r) exemption for a Federal project authorized by Congress is available only if an EIS is prepared that discusses the requirements of the 404(b)(1) guidelines.

Where Federal agencies are not involved, an EIS may be required under SEPA if a proposal will have significant adverse environmental effects. Significance is determined on the basis of a standard State-wide environmental checklist (see Appendix B), completed by an applicant in conjunction with a State or local permit application.

If an agency, such as a port authority, is the applicant, it is the lead agency for the EIS. In cases involving private applicants, the lead agency is the city or county from which a permit must be acquired. If a city or county is not involved, and permits must be obtained from more than one State agency, WDOE is the most likely lead agency. In a 404 situation, the local shoreline management agency is almost certainly the lead agency because activities taking place within and along the Sound are governed by and must comply with local coastal zone master plans.(13)

The lead agency reviews the environmental checklist and determines the significance of the proposed activity within 15 days. If a declaration of nonsignificance is issued, other agencies with jurisdiction over the proposed activity have 15 days to respond. Another agency with jurisdiction may assume lead status by issuing a notice to that effect with a declaration of significance.(59)

If the proposed activity is deemed significant, a declaration of significance is issued and an EIS is required unless the proposal can be modified to eliminate significant adverse effects. Each State and local agency has adopted its own rules, consistent with the State guidelines, to implement SEPA, WAC 197-10. If the rules of the lead agency allow it, an EIS may be prepared by the applicant under the direction of the lead agency. Otherwise, the EIS is prepared by the lead agency.(13)

The focus of an EIS is upon assessment of the adverse impacts that may result from the proposed activity or its alternatives, and analysis of measures that may be taken to mitigate or eliminate those adverse impacts. A draft EIS must be issued to State and Federal agencies with jurisdiction over the proposed activity, and to cities and counties where adverse effects may occur. Reviewing agencies have 35 days to respond. Notice to the general public is encouraged but not required, and a hearing may be held.(WAC 197-10-450)

If no critical comments are received, the draft EIS becomes the final EIS. Otherwise, the lead agency must prepare a final EIS within 75 days of issuance of the draft. The final EIS or an accompanying document must summarize and respond to critical comments, and be circulated to the agencies that received the draft.(13)

Where an EIS is prepared under NEPA and an EIS is also required under SEPA, the SEPA EIS will not be required if the NEPA EIS is considered adequate by the lead agency. If a NEPA EIS is considered inadequate by the lead agency, the lead agency may modify or supplement it, or prepare an independent draft EIS under SEPA.(13)

4.2 OBSTACLES TO DECISION-MAKING

This section describes the technical, administrative and statutory or regulatory obstacles to the 404 decision-making process. Section 4.3 contains conclusions.

4.2.1 Technical Obstacles

Two separate but closely related technical obstacles affect 404 decision-making. One obstacle is lack of data on some materials proposed to be discharged. The other is lack of criteria on which to judge the environmental significance of discharges.

Acceptability of material for water disposal is determined by application of the 404(b)(1) guidelines to information submitted by the applicant. The guidelines do not expressly require applicants to submit sampling information on materials proposed to be discharged unless the Corps has reason to believe the materials are contaminated. As a result, whether contaminants are present in discharged material is unknown in the majority of cases, and decisions to allow discharges are based on best professional judgment (BPJ).

In cases where problems are suspected, WDOE and EPA have taken the lead in requesting sampling information. However, there are no State water quality standards for priority pollutants and no sediment criteria for use in the 404 decision-making process. In short, there is a lack of criteria with which to determine sampling needs; there is no sampling rationale. Thus, even when sampling is required, decisions on what to sample for and what the samples mean are based solely on best professional judgment.

The absence of a sampling requirement in the majority of cases and the reliance on BPJ allow greater flexibility in application of the guidelines. Still, such flexibility has drawbacks; it creates a potential for arbitrary, inconsistent application of the guidelines. Also, the effectiveness of BPJ depends substantially on the technical competence of the personnel determining acceptability.

To understand the significance of environmental impacts of dredged or fill material discharged into Puget Sound, the relationship between contaminants in discharged material and the availability of those contaminants to aquatic organisms must be more clearly established. The link between contaminant loading rates, exposure fields in the water column, partition rates from the water column to the sediment and rates of resuspension must be better understood and translated to toxicity thresholds for informed, consistent 404 decision-making.

4.2.2 Administrative Obstacles

Two administrative obstacles to the 404 decision-making process were cited. The most universally cited obstacle is lack of personnel, both secretarial and professional, to process applications.

The other administrative obstacle cited by the Corps is delay in the permitting process. The Corps is concerned about delays because it is constrained by 404(q) to process applications within 90 days, to the extent practicable. Delay is most likely to be caused by local permit processing and is also caused by requests for further information on materials proposed for discharge.

The Corps is criticized for requiring insufficient information, but there seems to be a tacit agreement between the Corps, Region X and WDOE that review of most 404 applications requires no further information than is requested. The Corps maintains that it requests all the information that is required under 404 and the guidelines. While Corps personnel grant that some cases require further information and are too complex to be processed within 90 days, the Corps' basic orientation may lean more toward facilitating anchorage and navigation than preventing undesirable environmental impacts.

As for delays caused by the local shoreline management permitting process, a recent report for WDOE recommends that some streamlining of procedures is in order. The report suggests that WDOE should take the lead in setting up an interagency working group to clarify responsibilities in cases of overlapping Federal, State and local jurisdiction, and develop streamlined permit processes.(18)

Waiver of State water quality certification after 60 days is a potential obstacle to 404 decision-making, especially because WDOE seems to conduct the most in-depth reviews. However, the Corps' Seattle district has never considered a water quality certification waived. WDOE routinely notifies the district within 60 days of any delay in its review or in the reviews of the seven other State agencies that are coordinated by WDOE. The district has always granted the extensions required. Generally, WDOE personnel find the Corps' Seattle district to be responsive to their concerns.

4.2.3 Statutory or Regulatory Obstacles

The 404(b)(1) guidelines on acceptability of material for discharge are currently undergoing review at EPA headquarters in an effort to simplify them. While simplicity may provide desired flexibility, the lack of an attendant sampling rationale is considered an obstacle to informed 404 decision-making. For example, there are no standard tests for sediment that establish the link between material deposited and its availability and toxicity to aquatic organisms. Similarly, monitoring of dredging and of dredged or fill material discharges is rarely requested because there are no standards to determine monitoring needs. Sediment criteria and State water quality standards for priority pollutants should be addressed in the guidelines or associated guidance.

The guidelines do not require monitoring of the effects of dredging or of dredged or fill material disposal. Although WDOE occasionally requires monitoring of discharges, neither it nor any other State, Federal or local agency has taken a strong role in overseeing discharges and site monitoring. As discussed in Section 6, disposal sites are managed by DNR under locally issued shoreline management permits. DNR leases sites for use but monitors only on a spot-check basis. The monitoring gap may be overcome by an expansion of DNR's site management role, currently under consideration.

Increased site monitoring could also be required of DNR or its leasee by local shoreline management agencies through conditions placed in the disposal site permit. As discussed in Section 4.1.3.6, the recent attempt by Mason County to condition a disposal site permit so as to control the quality of material discharged may be a step in the direction of site monitoring. In the extreme, however, local control could lead to allowance of local dumping only. A stronger State or Federal role may be in order.

In addition, the absence of a Federal, State or local program to ensure adequate upland disposal sites for materials that are not acceptable for water disposal establishes a de facto presumption favoring discharge. JRB did not evaluate the availability of upland disposal sites, but Federal and State personnel agree that unless a material proposed to be discharged is known to be highly contaminated, it is likely to be discharged to the Sound simply because there is nowhere else to put it.(66J, O) Establishment of a program to ensure adequate upland disposal capacity should be a high regulatory priority.

4.3 CONCLUSIONS

Overall, the 404 process is fairly well streamlined in its operation, but decisions may be based on inadequate standards and data. Water quality standards for priority pollutants and sediment criteria should be addressed in the 404(b)(1) guidelines or associated guidance. A sampling rationale must be developed.

In addition, no agency has taken a strong role in overseeing discharges and site monitoring. This gap should be addressed by the guidelines or by State and local agencies.

Finally, the absence of any program to ensure adequate upland disposal sites establishes a de facto presumption in favor of water disposal. Rectifying this imbalance should be a high regulatory priority.

5. THE EAST, WEST AND DUWAMISH WATERWAYS NAVIGATION IMPROVEMENT PROPOSAL

The East, West and Duwamish Waterways navigation improvement project refers to the proposed deepening of the Federal navigation channels of the lower Duwamish River waterways in Seattle to allow deep-draft vessels better access and improved safety. This proposed dredging project will not follow the typical 404 permit process described in Section 4 of this report because it is exempted under Section 404(r) of the CWA.

The Duwamish Navigation Improvement Study was specifically authorized by Congress. As such, any resulting discharge of dredged material does not require a permit under Section 404 of the CWA as long as an environmental impact statement (EIS) under the National Environmental Policy Act is submitted to Congress before the commencement of construction-related discharges and prior to authorization of the project or appropriation of funds for it. Environmental analysis according to the 404(b)(1) guidelines is still required as part of the EIS process. An EIS is required for a 404(r) dredging proposal even before it actually becomes a Congressionally authorized project.

This section outlines the decision-making process on this navigation improvement proposal, including (1) the steps that have been taken to get from the stage of a "study" to the stage of a "proposed project," and (2) the steps needed to get the proposed project to the stage of a real construction project.

To provide background on the proposed project, the following material draws extensively from the "Final Feasibility Report and Final Environmental Impact Statement" (January 1983) prepared by the U.S. Army Corps of Engineers, Seattle District.(67)

5.1 BACKGROUND AND DESCRIPTION

As stated in the EIS and Feasibility Report, the Duwamish project had its genesis in a study resolution sponsored by Senator Warren G. Magnuson and adopted by the Senate Public Works Committee on May 18, 1956. The resolution directed the Corps of Engineers to review previously prepared reports on Seattle Harbor development, with particular reference to the advisability of improving the Duwamish Waterway.

In September 1978, the Port of Seattle and City of Seattle requested that the Corps of Engineers study the feasibility of enlarging and extending the Federal navigation channels for Seattle Harbor. The existing authorized channel dimensions were approved by Congress in 1935. However, with the increase in vessel size since then, the waterways have become too narrow and too shallow for safe passage by many of the larger, more cost-effective vessels now in use. Also, the EIS indicates that more vessels are using the Harbor area. It found that the Seattle Harbor total commodity tonnage increased 9.5 percent from 1975 to 1977 and 36 percent from 1977 to 1978. Between 1969 and 1978, the tonnage of commodities shipped through the East, West, and Duwamish Waterways grew at an average annual rate of 3.7 percent. This growth is projected to continue at an average annual rate of 2.8 percent to the year 2000, whether or not the existing channel is enlarged. According to the EIS (67), the Port has accommodated this growth through major redevelopment of existing outer harbor terminals for more intensive use.

With the outer harbor facilities nearing full capacity, the existing Federal navigation channel is the main area available for more intensive use. However, inadequate depths in the channel have resulted in such inefficient shipping practices as loading only partially, waiting for favorable tides, and using smaller, less cost-efficient ships. Restricted channel widths, particularly in the lower Duwamish Waterway, are also a navigation and safety problem. In June 1978, the dry-bulk carrier ANTONIO CHAVEZ collided with a supporting pier of the Spokane Street Bridge, causing permanent disablement of the drawspan mechanism and disruption of land traffic. The Port desires improvement of the channel so that the current and projected growth can be handled more safely and cost-effectively.

In response to the Congressional resolution and the Port of Seattle's request, the Seattle District, U.S. Army Corps of Engineers prepared the Feasibility Study (67), herein excerpted, to report to Congress on the need for, and feasibility of, improving and extending the existing Federal navigation channels. The Feasibility Report determined that there was a need for improvement of the navigation channels in the Duwamish and that the project was feasible.

During the study of navigation needs and problems, a number of possible solutions were considered. Alternatives considered in detail were no action and improvement of the Federal navigation channel. The no-action plan would result in continuation of present growth trends in the area. The nonstructural plan would increase navigation safety but not improve navigation efficiency.

Technical studies and agency and public input indicated that the public interest would best be served by a plan involving a moderate enlargement of the existing channels on the East, West, and lower Duwamish Waterways and replacement of the Burlington Northern railroad bridge. The recommended plan, as outlined in the Feasibility Report (67), includes the following specific actions:

- Deepening the authorized channel on the East and West Waterways from 34 to 39 feet
- Narrowing the authorized channel on the East and West Waterways from 750 to 500 feet (to permit ship berthing outside of the Federal channel)
- Enlarging the authorized lower Duwamish Waterway (downstream of First Avenue South Bridge) from 200 feet wide by 30 feet deep to 250 feet wide by 39 feet deep
- Replacing the Burlington Northern railroad bridge over the lower Duwamish Waterway to provide a minimum channel clearance of 250 feet
- Deepening of Turning Basin No. 1 at the head of Harbor Island
- Deauthorizing of the unneeded Turning Basin No. 2 upstream of the First Avenue South Bridge
- Filling the area between Piers 90 and 91 at South Cove in Elliott Bay with all dredged materials found to be contaminated (assumed for planning purposes to be the upper three feet of sediment or 1.1 million cubic yards)

- Disposing of dredged material that is found suitable for open water disposal (approximately 1.4 million cubic yards) at the Fourmile Rock Site just outside of Elliott Bay. Suitability will be determined by WDOE, EPA, and the Corps after considering water quality standards and the 404(b)(1) criteria

- Mitigating 2 acres of shallow-water/intertidal habitat that would otherwise be lost due to channel enlargement on the lower Duwamish

- Mitigating 2 acres of shallow-water habitat that would otherwise be lost through disposal of dredged material at Piers 90 and 91

- Mitigating lost deepwater habitat at Piers 90 and 91 via artificial reef construction comparable to fish productivity lost

- Increasing public access to the navigation channel and river environment through provision of a small boat ramp

- Increasing salmon rearing/reeding habitat by constructing an additional 2 acres of shallow-water/intertidal habitat as enhancement.

Federal responsibilities include initial and maintenance dredging of the improved navigation channel as well as sharing costs with local sponsors according to cost sharing authorities. The Port of Seattle will be local sponsor for the entire project, including channel enlargement, some mitigation features, and for a public access boat ramp added in response to expressed public interest. The local sponsor also provides lands required for channel enlargement, dredged material disposal sites, and utility relocations. The Port will also share in bulkheading and public access costs and would dredge their vessel berthing areas to depths commensurate with the enlarged channel. The Muckleshoot Indian Tribe, which has treaty fishing rights in the Duwamish River, will sponsor and share the cost of fishery enhancement features. The replacement cost of the Burlington Northern railroad bridge would be shared between the bridge owner and the Federal Government. A diagram of the project area is shown in Figure 5-1.

The EIS places the total cost of the plan at $50,400,000 (October 1981 price level). This includes approximately $20,550,000 for channel enlargement, $1,219,000 for berth dredging by local interests, $23,761,000 for railroad bridge replacement, $3,420,000 for mitigation, $300,000 for increased public access, and $1,150,000 for salmon fishery enhancement.

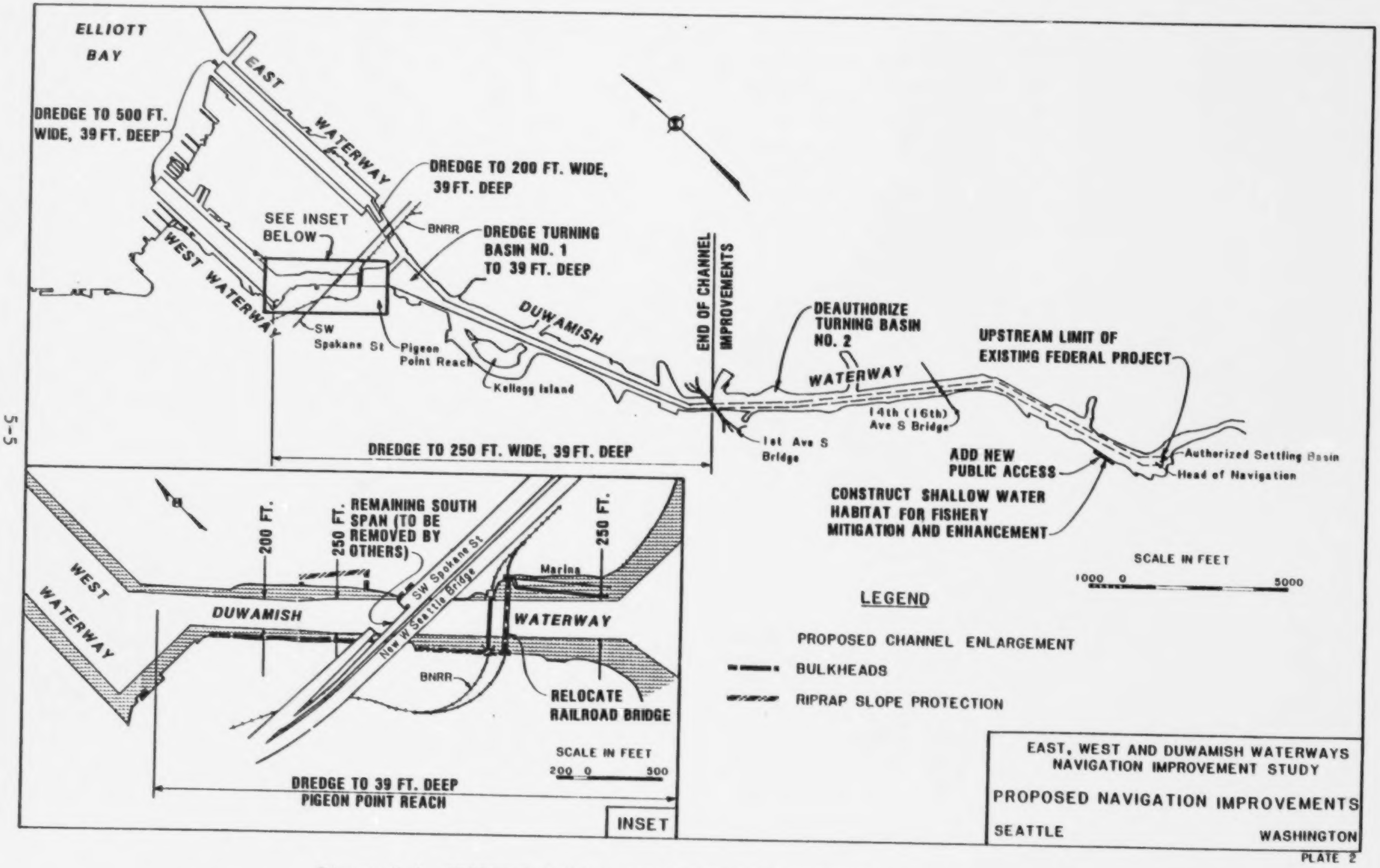
ELLIOTT BAY
DREDGE TO 500 FT. WIDE, 39 FT. DEEP
EAST WATERWAY
DREDGE TO 200 FT. WIDE, 39 FT. DEEP
SEE INSET BELOW
BNRR
DREDGE TURNING BASIN NO. 1 TO 39 FT. DEEP
WEST WATERWAY
SW Spokane St
Pigeon Point Reach
Kellogg Island
DUWAMISH
END OF CHANNEL IMPROVEMENTS
DEAUTHORIZE TURNING BASIN NO. 2
WATERWAY
UPSTREAM LIMIT OF EXISTING FEDERAL PROJECT
14th (16th) Ave S Bridge
1st Ave S Bridge
ADD NEW PUBLIC ACCESS
Authorized Settling Basin
Head of Navigation
CONSTRUCT SHALLOW WATER HABITAT FOR FISHERY MITIGATION AND ENHANCEMENT
DREDGE TO 250 FT. WIDE, 39 FT. DEEP
SCALE IN FEET
1000 0 5000
LEGEND
PROPOSED CHANNEL ENLARGEMENT
BULKHEADS
RIPRAP SLOPE PROTECTION
200 FT.
250 FT.
REMAINING SOUTH SPAN (TO BE REMOVED BY OTHERS)
250 FT.
Marina
WEST WATERWAY
DUWAMISH
WATERWAY
SW Spokane St
New W Seattle Bridge
BNRR
RELOCATE RAILROAD BRIDGE
SCALE IN FEET
200 0 500
DREDGE TO 39 FT. DEEP PIGEON POINT REACH
INSET
EAST, WEST AND DUWAMISH WATERWAYS NAVIGATION IMPROVEMENT STUDY
PROPOSED NAVIGATION IMPROVEMENTS
SEATTLE
WASHINGTON
PLATE 2

Figure 5-1. PROPOSED NAVIGATION IMPROVEMENT PROJECT: from Reference 67

Average annual costs over the project life, including average annual increased maintenance costs and interest during construction, are estimated in the EIS at $4,275,000 and the average annual benefits would be $10,078,000, resulting in a benefit-to-cost ratio of 2.4 to 1.

5.2 THE DECISION-MAKING PROCESS

This section outlines the agencies involved and their roles. It also presents relevant procedures, timing and criteria. Obstacles are discussed in Section 5.3.

5.2.1 The Agencies Involved

This subsection describes the main agencies and their responsibilities in the process of developing this proposal.

5.2.2.1 The U.S. Army Corps of Engineers

The Corps of Engineers is responsible for water resources development as part of the Federal Civil Works Program. The Corp undertakes survey investigation and other feasibility studies authorized by specific legislation or by resolution of the House Public Works and Transportation Committee or the Senate Environment and Public Works Committee.

The Corps of Engineers first received responsibility for civil works with an Act of Congress in 1824 for the improvement of rivers and harbors for navigation. Later legislation expanding Corps responsibilities includes:

- Establishment of the Board of Engineers for Rivers and Harbors, 1902
- The River and Harbor Act of 1899 (33 USC 401 et. seq.) established regulatory control over waters
- The National Environmental Policy Act of 1969 (Public Law 91-190) required preparation of an environmental impact statement to accompany every recommendation or report on legislative proposals or other major Federal actions that significantly affect the quality of the environment
- The River and Harbor and Flood Control Act of 1970 (P.L.-91-611) directed the Secretary of the Army to promulgate guidelines for

consideration of economic, environmental, and social effects of proposed projects

- The Water Resources Development Act of 1974 (P.L.-93-251) established a two-phase authorization procedure for major projects
- The Federal Water Pollution Control Act of 1972 and the Clean Water Act amending it in 1977 give the Corps primary responsibility for permits for discharges of dredged or fill material into waters of the United States under Section 404. Section 404(r) allows Congressionally authorized projects to be exempted from permitting requirements, if an EIS and 404(b)(1) evaluation are prepared before the project is authorized.

These and other acts have made the Corps' participation in areas of water resource management more comprehensive and changed public policy toward consideration of environmental and social objectives in resource planning and development activities.(48)

The Assistant Secretary of the Army for Civil Works works with the Chief of Engineers in planning, directing and controlling the Corp of Engineers. Civil works functions of the Corps are supervised by the Director of Civil Works within the Office of the Chief of Engineers. Other Boards and Commissions advise and support the Chief of Engineers directly.(48)

The bulk of the civil works program assigned to the Chief of Engineers is delegated to field offices. U.S. Army Engineer Divisions have jurisidiction over specified geographical areas and responsibility for administering the Corps mission involving civil works planning, engineering, construction, operation, and maintenance. Divisions also supervise U.S. Army Engineer Districts by reviewing major plans and programs. Districts in turn are the principal planning and implementation offices responsible for preparing water resource needs and development studies in response to Congressional resolutions. Districts also prepare engineering and design studies and construct, operate and maintain civil works facilities.(48)

Within this legislative and organizational framework, the Seattle District of the Corps of Engineers is reponsible for the Duwamish Navigation

Improvement project. The basic organization of the Seattle District is shown in Figure 5-2 in relation to other organizational groups.

5.2.2.2 The Port of Seattle

The Port of Seattle is a port district authorized to acquire, construct, maintain, and operate all forms of transfer and terminal facilities for land and water transportation. Port commissions are elected, have taxing authority, and may issue bonds to support industrial development districts established within their boundaries. Port districts are politically and financially independent of other local governments and they can have a substantial impact on development of a region's shoreline.(3)

As the local sponsor for the Duwamish Project, the Port will have responsibility for acquiring land to provide dredged material disposal areas and sharing other costs. The Port will have financial decisions to make later in the process. However, it is not a regulator and is not discussed in great detail in this report.

5.2.2.3 Other Agencies

Through the NEPA review and public notice process, the Corps must consult with a variety of agencies. The statutes and agencies that are relevant to this project are introduced briefly below. The agencies' comments and concerns about this project are presented in Section 5.2.3.

- Clean Water Act of 1977, (Federal Water Pollution Control Act Amendments of 1972) 33 U.S.C. 1251 et. seq. Evaluation of the effects of the discharge of dredged or fill material into waters of the United States, including consideration of the Section 404(b)(1) Guidelines must be included in an EIS prepared for all Corps actions where the recommended plan or approved project involves the discharge of dredged or fill material into waters of the United States. This procedure will satisfy Section 404(r) of the Act, upon submittal of the EIS to Congress, in lieu of issuing a public notice and obtaining a State water quality certificate.

- Coastal Zone Management Act of 1972, as Amended, 16 U.S.C. 1451 et. seq. Proposed Corps projects and activities significantly affecting land or water uses in the coastal zone of a State must be coordinated

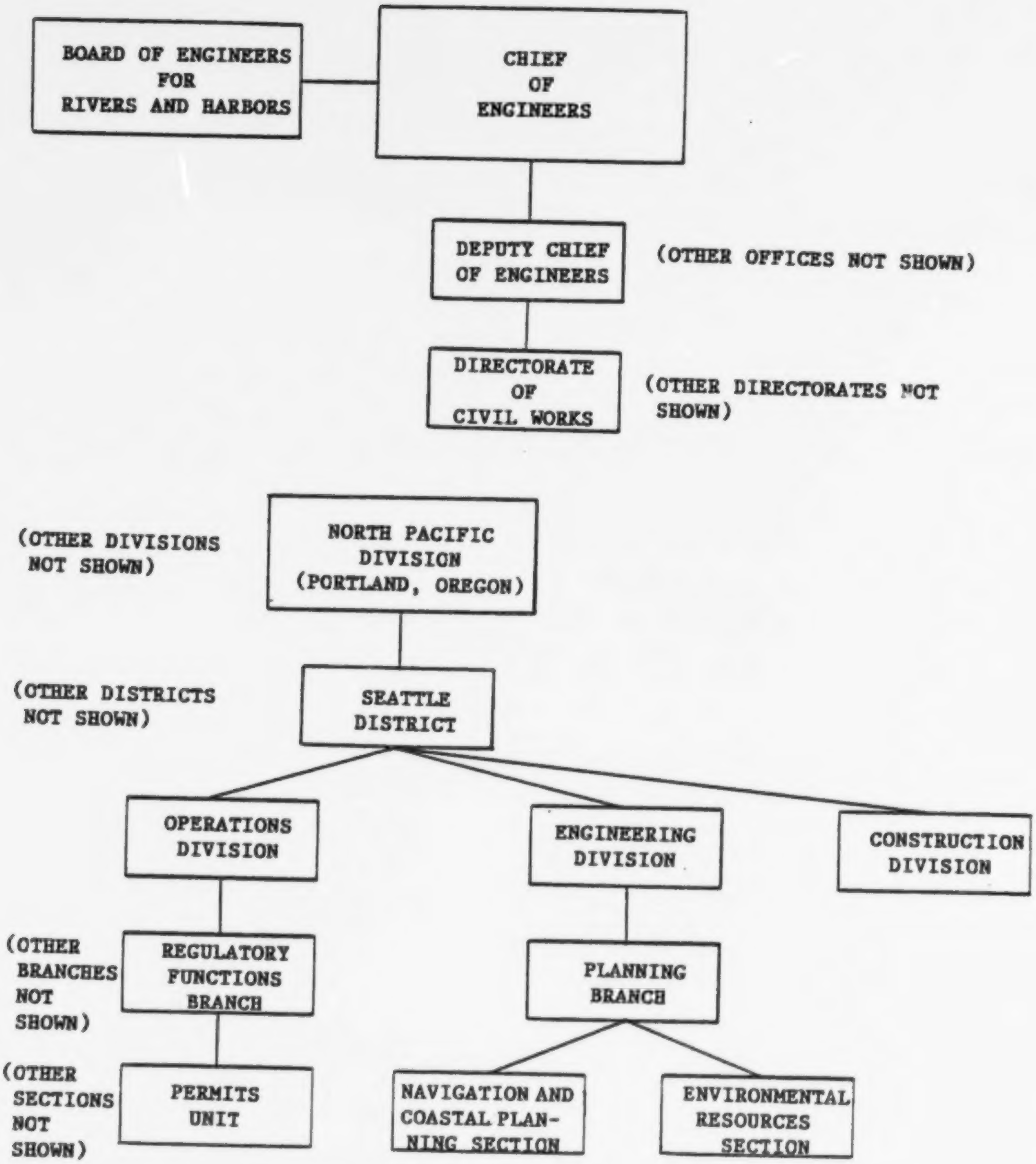
BOARD OF ENGINEERS FOR RIVERS AND HARBORS
CHIEF OF ENGINEERS
DEPUTY CHIEF OF ENGINEERS
(OTHER OFFICES NOT SHOWN)
DIRECTORATE OF CIVIL WORKS
(OTHER DIRECTORATES NOT SHOWN)
(OTHER DIVISIONS NOT SHOWN)
NORTH PACIFIC DIVISION (PORTLAND, OREGON)
(OTHER DISTRICTS NOT SHOWN)
SEATTLE DISTRICT
OPERATIONS DIVISION
ENGINEERING DIVISION
CONSTRUCTION DIVISION
(OTHER BRANCHES NOT SHOWN)
REGULATORY FUNCTIONS BRANCH
PLANNING BRANCH
(OTHER SECTIONS NOT SHOWN)
PERMITS UNIT
NAVIGATION AND COASTAL PLANNING SECTION
ENVIRONMENTAL RESOURCES SECTION

FIGURE 5-2

U.S. ARMY CORPS OF ENGINEERS
ABRIDGED ORGANIZATION

with the WDOE and determined to be consistent with the State's Shoreline Program.

- The Fish and Wildlife Coordination Act, 16 U.S.C. 661 et. seq. requires coordination with the appropriate Regional Director of the Fish and Wildlife Service (FWS), the appropriate Regional Director of the National Marine Fisheries Service (NMFS) and the head of the agencies responsible for fish and wildlife for the state.

- The Estuary Protection Act (16 U.S.C. 1221 et. seq.) requires EISs for projects affecting estuaries and their natural resources to be circulated to the Department of the Interior for review and comment.

- The Federal Water Project Recreation Act (16 U.S.C. 460-1-12 et. seq.) requires consideration of opportunities for outdoor recreation and fish and wildlife enhancement by the Department of the Interior.

- The Endangered Species Act of 1973, as Amended, 16 U.S.C. 1531 et. seq., requires coordination with the appropriate Regional Director of the Fish and Wildlife Service (FWS) and/or National Marine Fisheries Service (NMFS) to determine if any listed endangered or threatened species or species proposed for listing or their critical habitat may be present in the area of the proposed action.

- Clean Air Act, as amended, (42 U.S.C. 7609). The Regional Administrator of EPA must review EISs from the standpoint of public health or welfare or environmental quality under Section 309 of the Act and the determinations and findings required by Section 176(c) of the Act to assure conformity with the State implementation plan (SIP).

- The Preservation of Historical Archeological Data Act of 1974 (16 U.S.C. 469 et. seq.) requires coordination with appropriate State historic preservation officers, the Heritage Conservation and Recreation Service, the Advisory Council on Historic Preservation, and other groups with cultural resources expertise.

- Two local agencies, the City of Seattle and King County, will also be involved during the final stages of the project. In Washington, shoreline management permits must be obtained from local governments before construction of projects in the coastal zone. The State Shoreline Management, which authorized the shoreline permit program, is explained in detail in Section 6. Specific local permitting procedures for the City of Seattle are explained in Section 7.

The general public and Indian Tribes also become involved in the EIS review process and can have an impact. The Duwamish project as described in Section 5.1 includes some features designed to mitigate the concerns of the Indian Tribes, the public, and the Fish and Wildlife Agencies.

5.2.2 Procedures, Timing and Criteria

The Duwamish Navigation Improvement Project is well along in the decision-making process. This section outlines the entire process so that present and future events can be understood in light of past decisions. Figure 5-3 is a flow chart of this process.

This decision-making process was initiated partially because Congress passed a resolution in 1956 allowing the Corps to study and provide recommendations for the Seattle Harbor Area. Studies were undertaken and proposals to widen and deepen the Duwamish Waterways were made early in the 1970s. These early proposals languished because the perceived benefits of the project were counter-balanced by the high cost of bridges and related structures, which would have to be replaced at the expense of local agencies. In 1978 the cost-to-benefit ratio improved because Federal emergency relief funds became available to replace the damaged Spokane Street Bridge. By letters in September 1978, the Port and City of Seattle requested reactivation of the study with the Port acting as local sponsor.(67)

When the Seattle District Office of the Corps began the most recent study of navigation improvement in the Duwamish Waterways, a "Study Manager" from the Navigation and Coastal Planning Section was assigned to coordinate all aspects of the study. For a study of this type both a Feasibility Report and an Environmental Impact Statement are required.

Feasibility Studies are required for Congressional authorizations as the initial step in the planning process and are conducted in accordance with the Engineering Regulations in the Corps of Engineers' Planning Guidance Notebook. They are detailed studies concerning the need for and desirability of proposed projects. These implementation studies focus on formulating a recommended plan of action to meet long-term needs and alleviate problems. Studies resulting in recommendations are documented in Feasibility Reports. In the planning process, a Feasibility Study would be followed by advanced engineering and design and, finally, detailed plans and specifications, if the proposed project were authorized.(48)

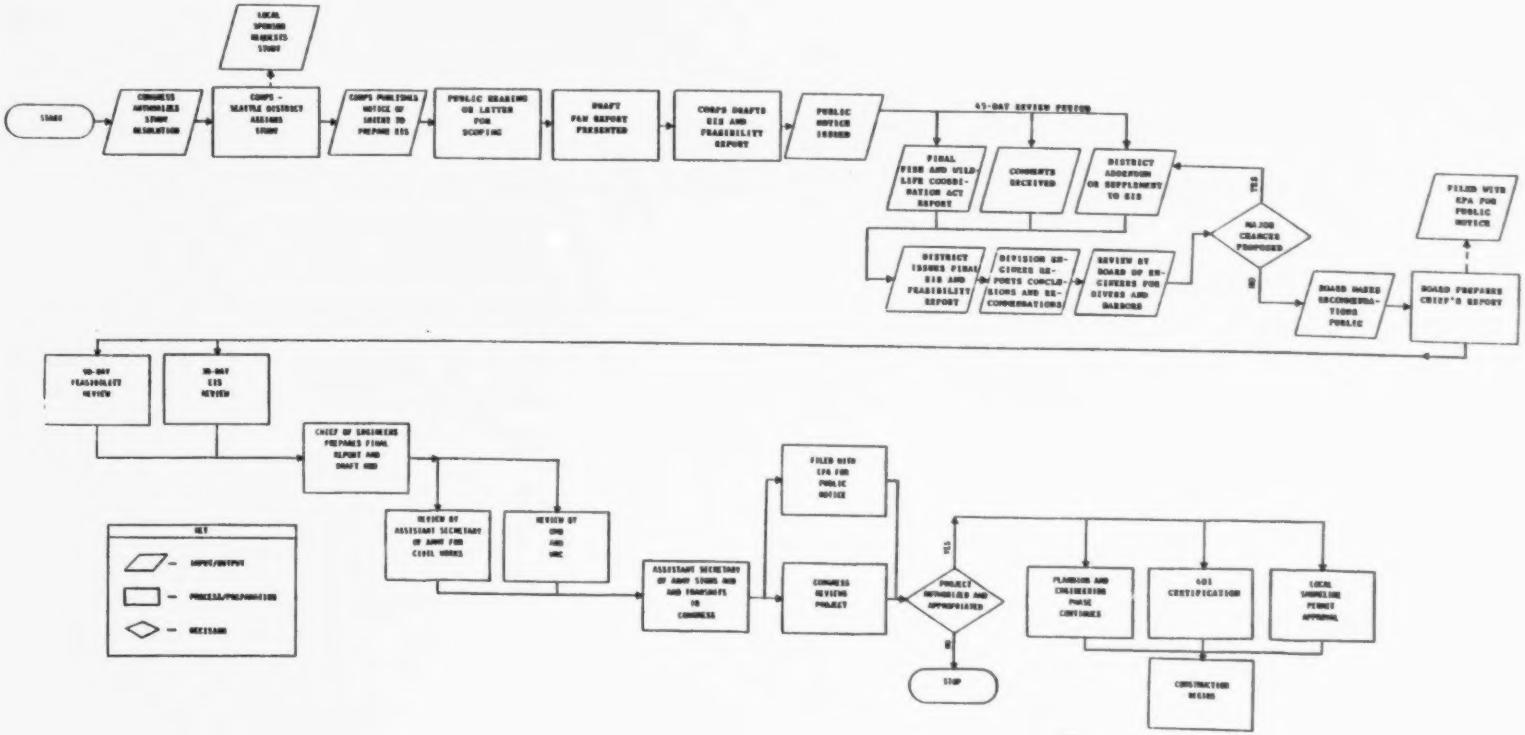
START
CONGRESS AUTHORIZES STUDY RESOLUTION
LOCAL SPONSOR REQUESTS STUDY
CORPS - SEATTLE DISTRICT ASSIGNS STUDY
CORPS PUBLISHES NOTICE OF INTENT TO PREPARE EIS
PUBLIC HEARING OR LETTER FOR SCOPING
DRAFT F&W REPORT PRESENTED
CORPS DRAFTS EIS AND FEASIBILITY REPORT
PUBLIC NOTICE ISSUED
45-DAY REVIEW PERIOD
FINAL FISH AND WILDLIFE COORDINATION ACT REPORT
COMMENTS RECEIVED
DISTRICT ADDENDUM OR SUPPLEMENT TO EIS
DISTRICT ISSUES FINAL EIS AND FEASIBILITY REPORT
DIVISION ENGINEER REPORTS CONCLUSIONS AND RECOMMENDATIONS
REVIEW BY BOARD OF ENGINEERS FOR RIVERS AND HARBORS
MAJOR CHANGES PROPOSED
YES
NO
BOARD MAKES RECOMMENDATIONS PUBLIC
BOARD PREPARES CHIEF'S REPORT
FILED WITH EPA FOR PUBLIC NOTICE
90-DAY FEASIBILITY REVIEW
30-DAY EIS REVIEW
CHIEF OF ENGINEERS PREPARES FINAL REPORT AND DRAFT ROD
REVIEW BY ASSISTANT SECRETARY OF ARMY FOR CIVIL WORKS
REVIEW BY OMB AND WRC
ASSISTANT SECRETARY OF ARMY SIGNS ROD AND TRANSMITS TO CONGRESS
FILED WITH EPA FOR PUBLIC NOTICE
CONGRESS REVIEWS PROJECT
PROJECT AUTHORIZED AND APPROPRIATED
YES
NO
STOP
PLANNING AND ENGINEERING PHASE CONTINUES
401 CERTIFICATION
LOCAL SHORELINE PERMIT APPROVAL
CONSTRUCTION BEGINS
KEY
- INPUT/OUTPUT
- PROCESS/PREPARATION
- DECISION

FIGURE 5-3

CORPS OF ENGINEERS FLOW CHART FOR FEASIBILITY STUDY AND ENVIRONMENTAL IMPACT STATEMENT ON DUWAMISH PROJECT

Studies of this type are also governed by NEPA (42 U.S.C. 4371 et. seq.), which establishes procedures to ensure that environmental information is available to public officials and citizens before decisions are made. The CEQ regulations for implementing NEPA (40 CFR 1500 et. seq.), are designed to integrate environmental considerations early in the planning process and to emphasize cooperative consultation among agencies. Normally, under the NEPA process, an environmental assessment is done to determine whether an EIS is necessary, but this is not done if the agency has already decided to prepare an EIS. The Corps normally prepares an EIS for Feasibility Studies, operation and maintenance activities, regulatory permits, and real estate actions. Also, an EIS is necessary for a study of a proposal for a Congressionally authorized 404(r) project. As the Corps is lead agency for EIS purposes, the Corps' regulations found at 33 CFR 230 govern. The Feasibility Report and EIS process are discussed together in this section.

Before initiating the study, the CEQ regulations require scoping to determine the range of issues to be evaluated during the Feasibility Study and EIS. A notice of intent to prepare an EIS was published in the Federal Register and EPA's Regional Office was notified. In connection with civil works planning activities, public meetings are required at various stages to advise on the nature and scope of a proposed study, to present the results of preliminary studies, and to present detailed findings and tentative recommendations at later stages. The Corps held formally organized, announced, and recorded public meetings and workshops in June 1980, July 1981, and July 1982. A formal scoping meeting was also held.

After scoping, preparation of the draft EIS and Feasibility Report began. Both reports are integrated into one document but are kept self-contained so that they can be read and understood separately. An EIS is meant to serve as an action-forcing device for decision-making, not just a disclosure document. To this end, a number of things must be considered during preparation of an EIS. Corps regulations state that:

- Federal projects involving disposal of dredged material in navigable waters at a specified disposal site must be evaluated by applying 404(b)(1) guidelines
- If the 404(b)(1) guidelines alone would prohibit the disposal, the Corps would also consider the effect that not disposing would have on maintenance of navigation, including economic impacts
- If the project involves periodic maintenance dredging, the 404(b)(1) determination must also consider these future disposal needs
- Dredged material will not be disposed of in wetlands unless the benefits of disposal outweigh the damage to the wetlands
- Disposal activities that affect the coastal zone must be evaluated to ensure that they are consistent with the State Shoreline Master Program "to the maximum extent practicable"
- Federal projects under 404(r) do not need a Section 401 water quality certification from the State if an EIS is submitted to Congress before the actual discharge of dredged material
- Related work in the same area must also be considered during planning and review of the Federal project.

Other agencies' perceptions of how well the Corps addressed these considerations are discussed in Section 5.2.3.

The NEPA guidelines at 40 CFR 1500 specify the format and content of an EIS, which must include among other things, discussions of the need for and objectives of the action, alternatives, affected environment, environmental effects, and a summary of major conclusions and findings, areas of controversy, and unresolved issues. Also, when information is lacking or uncertainty exists, that must be clearly stated. After the draft report was prepared, the District Engineer filed it with the EPA and sent public notices to all parties who requested notices, to the U.S. Senators and Representatives for the area, the Field Representative of the Secretary of the Interior, the Regional Director of the Bureau of Sport Fisheries and Wildlife, the Regional Director of the National Park Service, the Regional Administrator of the Environmental Protection Agency, the Regional Director of the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration (NOAA), the head of the State agency responsible for fish and wildlife resources (WDF and WDG), the District Commander, U.S. Coast Guard, and the Office of the Chief of Engineers. The EPA also publishes a weekly notice in the Federal Register announcing all EISs filed during the week. The draft EIS and Feasibility Report were distributed for a 45-day comment period in June of 1982.(67)

Federal agencies are required to respond as specifically as possible and, if any object, they should describe alternative methodologies, additional information needs, and mitigation measures they consider necessary to allow granting of any applicable permit or license. At this point, agencies may refer objections to the Council on Environmental Quality (CEQ) within 25 days or people may request a public hearing. Neither of these happened in the Duwamish project. If an agency does not respond, the Corps assumes there is no objection. The Fish and Wildlife Coordination Act Report was also prepared during this time and finalized in September 1982.(49)

After receiving this input, the District Engineer prepared a final EIS that responded to all comments. Responses at this stage may include:

(1) Modifying alternatives including the proposed action.

(2) Developing and evaluating alternatives not previously given serious consideration.

(3) Supplementing, improving, or modifying the analyses.

(4) Making factual corrections.

(5) Explaining why the comments do not warrant further response.(33 CFR 230)

The District Engineer's final EIS and Feasibility Report was dated January 1983, and included the general plan outlined in Section 5.1. The "final" document, which included both the EIS and Feasibility report, was submitted to the Division Engineer for review, approval, and transmittal to the Board of Engineers for Rivers and Harbors. Following the normal NEPA process, there would be a public notice at this stage. Although at this point the document was available for public review and the EIS was identified as "final," the Feasibility Report was still an interim document under COE review and subject to revision because several levels of internal review remained.(66B)

The Brigadier General for the North Pacific Division in Portland concurred with the conclusions and recommendations of the Seattle District Engineer in March of 1983. As the document goes up the chain of command, the "reporting officer" prepares a report at each level. Reports of this type are usually in letter form and are supposed to discuss:

- Views of State and local authorities
- Corps views concerning probable effects on:
    - Navigation
    - Marine life
    - Wildlife
    - Water quality
    - Coastal zone management plans
    - Persistence and permanence of the effects of pollutants on the waterbody
    - Effect of volumes and concentrations of pollutants
    - Alternate disposal methods or pollutant recycling measures
- Conclusions
- Recommendations.(33 CFR 230)

These reports are usually prepared with substantial input from the Seattle District, which started the process.(66B)

At this point, the Division Engineer sent the report to the Board of Engineers for Rivers and Harbors and issued a public notice indicating that comments could be sent to the Board. If the Board of Engineers' review and action had resulted in major revisions to the proposed plan, an addendum for alternatives described in the draft EIS or a supplement to the EIS for new alternatives not previously considered would be prepared with the assistance of the Seattle District.

When the Board completed its review it made recommendations to the Chief of Engineers. These recommendations were made public and the Board began preparation of the proposed report of the Chief of Engineers. The Board of Engineers concurred with the need for all points of the proposed plan but recommended that the Federal government not participate in funding the proposed mitigation measures.(66Q) This is consistent with the Corps' policy as stated in the Digest of Water Resources Policies and Authorities.(48) The policy on mitigation states that the Federal government is not normally responsible for damages incidental to civil works activities within areas subject to navigation servitude. Usually local interests are required to hold the United States free from damages due to construction operation or maintenance as a condition of project authorization. The Corps tries to prevent damages to fish and wildlife resources through good planning. Measures to offset unavoidable damages to fish and wildlife are included in projects only when the costs are justified. Acquisition of lands or waters for this purpose requires specific Congressional legislation. After construction, responsibility for operation and maintenance of mitigation features is usually designated to the most effective agency through the authorizing legislation. Responsibility for funding operation and maintenance rests with the responsible agency.

At the beginning of September, the proposed Chief's report, together with all previous reports, was submitted to the Governor of Washington and to all Federal agencies at the headquarters level and filed with EPA for public notice. The public notice period for the Feasibility Report is 90 days long for all Federal agencies and the Governor. The public notice on the final EIS, which was published October 7, 1983, is only 30 days long, per NEPA guidelines, for all other groups and individuals with interest. Comments on the EIS are due by November 7, 1983.

After the 90-day period, the proposed report of the Chief of Engineers will be made final and a draft Record of Decision will be prepared with assistance from the Seattle District. The Record of Decision will:

- State what the decision was
- Identify all alternatives considered
- State whether all practicable means to avoid or minimize environmental harm have been adopted.(40 CFR 1505.2)

The Chief of Engineers will sign the final Feasibility report and EIS and transmit it and all accompanying documents, including the draft Record of Decision, to the Assistant Secretary of the Army for Civil Works. The Assistant Secretary will send the package to the Office of Management and Budget for review. A proposed letter to Congress will be included, but not the draft Record of Decision. The Water Resources Council is supposed to have a review at this point also, but funds were never provided for this function.(33 CFR 230)

After OMB provides its findings to the Assistant Secretary of the Army, the Assistant Secretary will sign the Record of Decision and transmit the entire package to Congress. At the same time, the final Record of Decision will be filed with EPA for public notice and copies will be available for public review. This constitutes the final step in processing of Feasibility Reports.

The local districts' study period ended when the report was sent to the division, in January of this year. The next phase the proposed project would enter is Continuation of Planning and Engineering (CP&E), or detailed design studies. Under general authorities and the resolution, the District Office can initiate some studies for this phase without specific Congressional authorization. Congressional authorization and appropriation are needed before entering the plans and specifications stage.(66Q)

The Feasibility Study considered possibilities and made plans based on assumptions. It was not meant to provide concrete answers and fixed project activities. For example, sites for mitigation cannot be acquired for a Feasibility Study. Nevertheless, some commentators felt that the Corps left too many unanswered questions in this report.(66G,O,E) The Continued Planning and Engineering phase is meant to answer some of these questions. CP&E phase studies include analyses to either reaffirm the basic planning decisions or to reformulate the project to be responsive to changed needs. Initiation and scheduling of these types of studies depend on the relative importance of the project, local interest and cooperation, and availability of funds. Some District funds have been obtained for fiscal year 1985.(66Q) Some of the types of activities planned for CP&E for the Duwamish Project are:

- Sampling and analysis of sediment cores to determine the depth of contamination and the volume of spoil that must be accommodated
- Evaluating use of substrate that enhances benthic life along the waterway
- Selecting a location and design of the proposed artificial reef
- Evaluating methods of containing contaminated materials at Pier 90/91
- Planning and coodinating a monitoring program of chemical and biological testing of the type and extent of contamination.(67)

Any reports developed during the next phase must go through an approval process similar to that described for the Feasibility Study. If there is a significant difference between the final project plans and the project evaluated in the EIS, supplements or entire new statements may be needed, each requiring a lengthy approval process. The average time for a Federal project to move from initiation to construction is about 19 years. Construction for the Duwamish project is not expected until the 1990s.(66Q)

5.2.3 Coordination With Other Agencies

Coordination of this proposed project has taken place through all appropriate regulatory channels. In addition to Federal agencies, State and local agencies were consulted, including:

- WDOE
- WDF
- WDG
- DNR

- Office of Archaeology and Historic Preservation
- Washington Parks and Recreation Commission
- City of Seattle
- King County
- Port of Seattle
- Muckleshoot Indian Tribe.

Concerns over maintaining critical salmon habitat were addressed by replacing habitat otherwise lost to the project. Increased public access was included in the selected plan in response to community interest. Further coordination with resource agencies and the public will occur during the Continuation of Planning and Engineering phase of the project.(67)

The Feasibility Report states that "no major areas of controversy or outstanding issues are known to remain." Although major issues have been addressed, some agencies still expressed reservations about the project.

5.2.3.1 Fish and Wildlife Agencies

The Fish and Wildlife Coordination Act Report on the Duwamish Project, dated September 1982, was prepared by the Olympia Office of the U.S. Fish and Wildlife Service. State and Federal fisheries agencies and the Muckleshoot Indian Tribe are concerned that the Corps' final report addresses all concerns but does not completely resolve them. Also, there is concern over the Board of Engineers' failure to endorse funding of mitigation measures. (66G,O,E) WDOE has recently prepared the State response on the Duwamish Project. There will be opportunities to resolve remaining concerns during the next phase of the project, CP&E.

The fisheries concern arises because juvenile salmonids currently feed in shallow/intertidal habitat along the entire length of the Duwamish during their weeks-long outmigration to the sea. Since shallow water habitat will be destroyed all along the deepened channel, proposed mitigation plans include construction of new isolated feeding habitat sites. The proposed sites have similar total area to that destroyed but do not have a similar habitat regime because fish may not be able to manage feeding discontinuously at sites miles apart along the river.(660) The Fish and Wildlife Coordination Act Report proposed creating additional habitat along the deepened channel by grading the slopes of the channel and using light riprap as substrate to enhance growth of benthic and epibenthic invertebrates used as food by salmonids. The Corps agreed to study this habitat mitigation issue during Continuation of Planning and Engineering.

The Muckleshoot Indian Tribe shares this concern about mitigation and expressed another, that increased commercial shipping would displace Indian fishermen to less desirable locations. This concern was addressed by proposing that the Tribe sponsor and share the cost of fisheries enhancement measures, with the Federal government sharing costs.(67)

Thus, the Corps addressed agency concerns by incorporating specific proposals and activities into the Feasibility Report and by agreeing to study certain issues during CP&E.

5.3 DISCUSSION OF OBSTACLES TO DECISION-MAKING

The planning horizon for this project is almost a decade. The potential obstacles discussed in this section may not become apparent for several years, but acknowledging them now may help to alleviate difficulties later.

5.3.1 Technical Obstacles

In addition to the need for better technical information, logistical problems, or lack of knowledge about the future, are important technical obstacles in this case.

Many alternative sites were investigated during the Feasibility Study. For planning purposes, the Corps has assumed that some of the dredged material will be deposited between Piers 90 and 91 and the rest will go to the Fourmile Rock site. Logistical problems could arise because both sites could be unavailable by 1990 when construction is expected to begin. The Fourmile Rock site requires local shoreline permit renewal at least every five years, as discussed in Section 7 of the report. The City of Seattle has the option of not renewing the permit for dredge disposal or prohibiting certain types of materials at Fourmile Rock. The Corps feels that this may not be a realistic option in that many public and private entities, other than the Corps, also use the site.

The Pier 90 and 91 site owned by the Port of Seattle is being considered for several uses, including a Naval Facility. If the site is developed for other purposes, it could be unavailable for filling by the Corps in 10 years. Also, other upland disposal sites may not be more viable in the future, considering the existing shortage of such areas. These logistical obstacles may make the proposed dredging more difficult or necessitate additional related studies. On the other hand, it must be noted that the Corps can consider different disposal sites than other users, because of its regulatory powers and its ability to pay. Still, close coordination with the City and the Port, as well as active planning for upland disposal, can help prevent logistical problems in the future.

5.3.2 Administrative Obstacles

The City of Seattle, the Port of Seattle, King County and the public are aware that the navigation improvement project will facilitate industrial and commercial growth. Local planning agencies foresee demand on surrounding areas for backup space, warehouses, and other facilities to support the expanded terminal facilities.(67) A logical extension of the project will be dredging of berthing and terminal areas to facilitate the larger ships that will be using the deepened waterways. Although these privately owned areas are not the Corps' responsibility, dredging activities and, therefore, 404 permitting activities will increase as a result of the overall navigation improvement. These developments will also necessitate increases in the level of activity in Seattle's and King County's Shoreline Master use permitting programs. Furthermore, a representative from Metro suggested at the recent Interagency Open Water Site Evaluation Committee meeting that near-shore berthing and docking areas may be more contaminated than the central channel (24), due to run-off, spills, and leaks associated with industrial activity.

Thus, the number and complexity of requests for shoreline and 404 permits would be increasing together, making individual decisions more difficult and time-consuming. Although local agencies and the Federal government have overlapping permitting responsibilities in shoreline areas, like the lower Duwamish, local governments perceive that their role is not considered seriously by Federal decision-makers. Rather than participating together in related permitting activities, there is often a local perception of disregard and lack of desire for coordination.

The Coastal Zone Management Act of 1972 (CZMA) requires Federal agencies conducting activities directly affecting the coastal zone to ensure that projects are consistent with approved State management programs to the maximum extent practicable. Washington's Shorelines Management Act, which implements the CZMA, gives primary regulatory responsibility to local governments through shoreline master programs, which are part of the approved State management program and State law. The Corps must use the local shoreline master program requirements for guidance when making consistency determinations for Federal activities in the coastal zone. Both the City of Seattle and King County have jurisdiction over shorelines where the Duwamish Project is planned. WDOE reviews consistency determination prepared by the Corps. The Corps is not required to delay or abandon proposed activities based on State concerns, but the State encourages reassessment, especially if it disagrees and suggests alternatives. The State also urges consultation and informal discussion to resolve concerns and develop a proposal that is consistent with the State's program, to the maximum extent practicable.

The Hydraulic Project Approval (HPA) process is administered by the Washington Departments of Fisheries and Game as described in Section 6. As mentioned, the Board of Engineers' recent report endorsed the idea of habitat mitigation and fisheries enhancement but not the funding for it. This is certain to raise the level of concern among the fisheries agencies and Indian tribes who agreed to the proposal only after specific mitigation measures were included. WDF brokers the concerns of all the State agencies when deciding on a HPA. This approval may not be necessary for a Federal project of this type.

However, if habitat mitigation concerns are not resolved, this could become an issue when the proposed project is nearer to implementation.

5.3.3 Statutory or Regulatory Obstacles

Before this proposal to deepen the Duwamish Waterways can become a project, Congress must review the documents and act. Congressional action may:

- Authorize the project
- Authorize and appropriate funds for the project
- Request additional studies
- Terminate the proposal.

It should be noted that a Federal project of this type has not been authorized since 1976. There is a backlog of authorized projects that have not yet been funded. Thus, even if all Corps approvals go smoothly and Congress acts quickly, timely commencement of construction is not guaranteed.

Extensive review and coordination at each stage of the project can cause unexpected delays. Futhermore, the NEPA guidelines at 40 CFR 1505.3 allow agencies to provide for monitoring to assure that their decisions are carried out. Mitigation and other conditions established in the EIS and committed as part of the decision must be implemented by the COE. In implementing a decision, the COE must also:

- Include appropriate conditions in grants, permits or other approvals
- Condition funding of actions on mitigation
- Inform other agencies of progress in implementation.(40 CFR 1500)

Additional conditions or restrictions on site use, mitigation measures, etc., could be placed by a Federal agency with jurisdiction, or a State or local agency whose approval is required.

5.4 CONCLUSIONS

Actual construction and dredging on the Duwamish are not expected until at least 1990. Even this schedule may be unachievable, considering logistical obstacles and the need for Congressional action and State and local approvals.

The Continuation of Planning and Engineering phase of the proposed project provides a means of collecting more information about the extent and effect of contamination in the project area, through sampling and monitoring. Several issues that were not completely resolved in the Feasibility Report should be studied further before construction begins.

- Data indicates that the most contaminated areas of the Duwamish are berthing areas and docks, which will most likely be dredged by private applicants after the proposed channel deepening. The extent and nature of this related dredging should be investigated so that disposal capacity can be left available or planned at other locations.
- The Feasibility Study considered various disposal sites but not the environmental effects of using them. The impacts of disposing of the Duwamish sediments at the Fourmile Rock open water disposal site should be investigated.
- The methods and extent of mitigation for loss of fish habitat should be investigated. The approval of Federal and State fish and wildlife agencies depends on resolution of this issue.

Enhanced understanding of these issues and responsiveness to State and local viewpoints will facilitate consistency determinations or other approvals that may be necessary.

6. DESIGNATION OF OPEN WATER DISPOSAL SITES

There are ten sites in Puget Sound used for open water disposal of dredged material. There are other designated sites in the Strait of Juan de Fuca and along the Pacific Coast. Dredged spoil disposal sites are necessary to support maintenance and special dredging projects throughout the Puget Sound region for economic reasons and because of a severe scarcity of upland disposal areas, or landfills.

The need for designation of an open water disposal site may be realized by a local port authority maintaining navigation channels, a developer constructing a marina, or a regulatory agency with jurisdiction over dredging activities, such as the Corps of Engineers or the Washington Department of Natural Resources (DNR).

Redesignation of an existing site necessitated by expiration of its local shoreline permit is a far more common procedure than designation of new sites. Because it initiates the decision-making process of designating or redesignating a site, DNR is treated as the key agency in the following discussion.

6.1 THE DECISION-MAKING PROCESS

This section describes how dredged material disposal sites in open water are selected, designated and managed. The agencies involved and their decision-making responsibilities are introduced. The public input process and the environmental review process are also outlined.

6.1.1 The Agencies Involved

In Washington, the Department of Natural Resources (DNR) regulates beds of navigable waters and manages the standards and procedures used in lease management, land use allocation and development activities, including open water disposal sites. DNR selects, establishes, and manages sites with the advice of the Interagency Open Water Disposal Site Evaluation Committee, which was created by DNR regulation. In addition to DNR, Washington's Departments of Ecology, Fisheries, and Game are represented on this Committee. Federal representatives on the Committee include EPA Region X, the U.S. Army Corps of Engineers, the National Marine Fisheries Service, and the U.S. Fish and Wildlife Service.

Although not represented on the Committee, local governments are also involved in this decision-making process. Local governments have the responsibility for implementing shoreline management programs under State law. A dredged material disposal site cannot be operated unless a local shoreline management permit is granted.

The next section describes DNR's procedures and criteria for site selection and management. Local permit procedures are discussed as a separate process. The roles of other agencies are discussed in Section 6.1.3.

6.1.2 Procedures, Timing and Criteria

This section focuses on the role of the Department of Natural Resources in the site designation decision-making process. Figure 6-1 is a flow diagram of the decision process. The Marine Lands Management Division of DNR, shown in Figure 6-2, plays the major role in designating open water disposal sites. DNR regulations (WAC 332-30-166) outline site designation criteria, site management procedures, and composition of the Interagency Open Water Disposal Site Committee.

6.1.2.1 Selection of Sites

As chair of the Interagency Committee, DNR schedules meetings and determines the agenda. The need for sites, approaching expirations of local permits for existing sites, and previous Committee discussions are factors in deciding the priority of items on the agenda.

The Interagency Committee meets irregularly at the request of DNR to provide scientific and regulatory advice on designation of open water disposal sites. The Committee's role is to evaluate sites, discuss alternatives and make recommendations to DNR. DNR reviews the Committee's recommendations and decides whether to pursue establishment of a site. For a more detailed

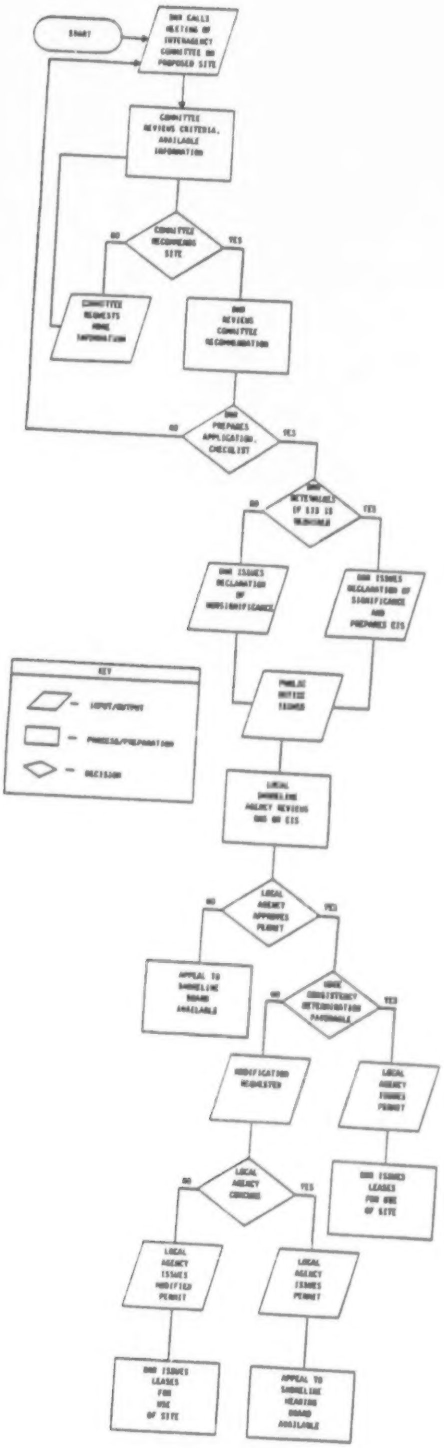
START
DNR CALLS MEETING OF INTERAGENCY COMMITTEE ON PROPOSED SITE
COMMITTEE REVIEWS CRITERIA, AVAILABLE INFORMATION
COMMITTEE RECOMMENDS SITE
NO
YES
COMMITTEE REQUESTS MORE INFORMATION
DNR REVIEWS COMMITTEE RECOMMENDATION
DNR PREPARES APPLICATION, CHECKLIST
NO
YES
DNR DETERMINES IF EIS IS REQUIRED
NO
YES
DNR ISSUES DECLARATION OF NONSIGNIFICANCE
DNR ISSUES DECLARATION OF SIGNIFICANCE AND PREPARES EIS
KEY
- INPUT/OUTPUT
- PROCESS/PREPARATION
- DECISION
PUBLIC NOTICE ISSUED
LOCAL SHORELINE AGENCY REVIEWS DNS OR EIS
LOCAL AGENCY APPROVES PERMIT
NO
YES
APPEAL TO SHORELINE BOARD AVAILABLE
DOE CONSISTENCY DETERMINATION FAVORABLE
NO
YES
MODIFICATION REQUESTED
LOCAL AGENCY ISSUES PERMIT
DNR ISSUES LEASES FOR USE OF SITE
LOCAL AGENCY CONCURS
NO
YES
LOCAL AGENCY ISSUES MODIFIED PERMIT
LOCAL AGENCY ISSUES PERMIT
DNR ISSUES LEASES FOR USE OF SITE
APPEAL TO SHORELINE HEARING BOARD AVAILABLE

FIGURE 6-1

DECISION-MAKING PROCESS FOR DESIGNATION OF OPEN WATER DISPOSAL SITES

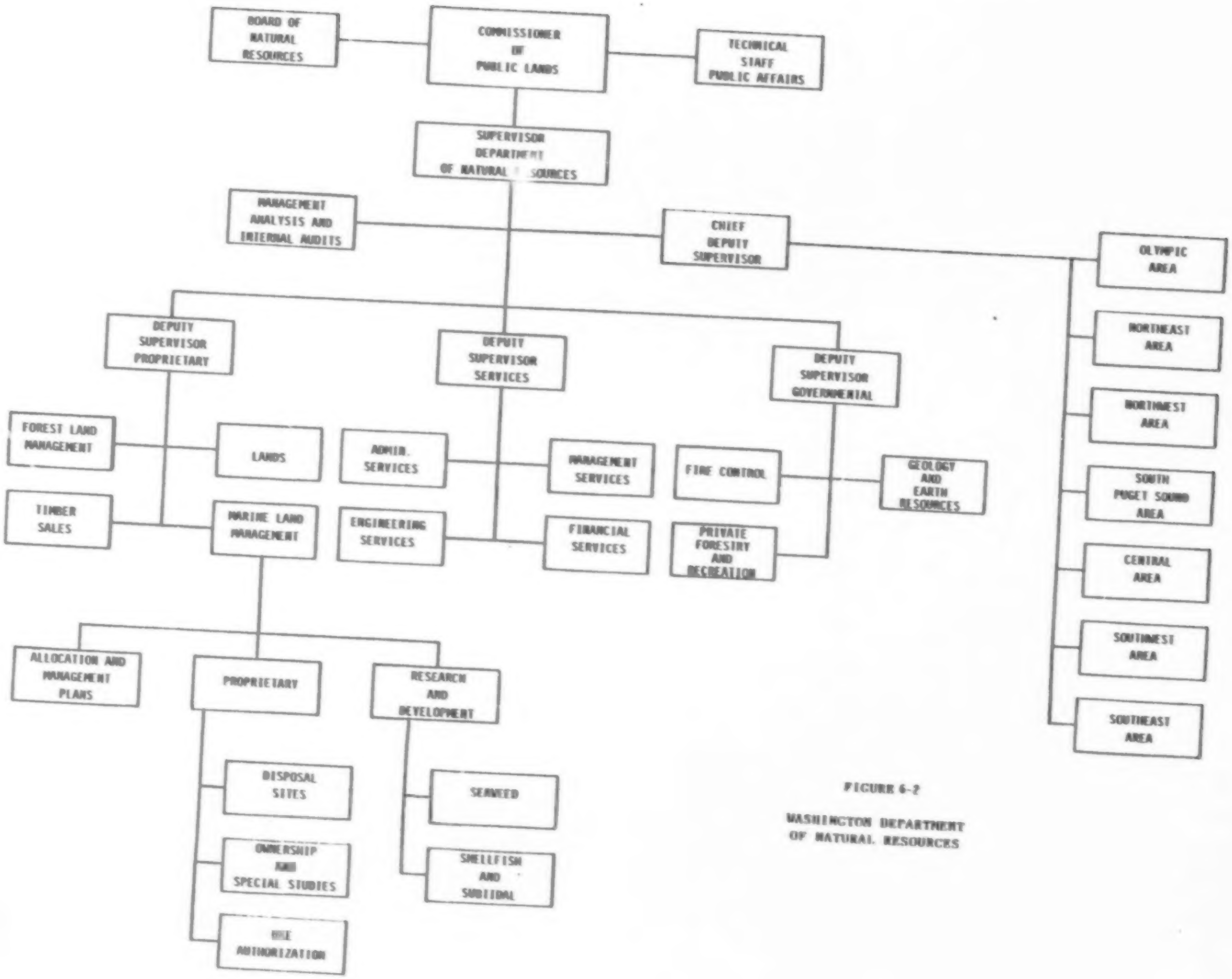
BOARD OF NATURAL RESOURCES
COMMISSIONER OF PUBLIC LANDS
TECHNICAL STAFF PUBLIC AFFAIRS
SUPERVISOR DEPARTMENT OF NATURAL RESOURCES
MANAGEMENT ANALYSIS AND INTERNAL AUDITS
CHIEF DEPUTY SUPERVISOR
OLYMPIC AREA
NORTHEAST AREA
NORTHWEST AREA
SOUTH PUGET SOUND AREA
CENTRAL AREA
SOUTHWEST AREA
SOUTHEAST AREA
DEPUTY SUPERVISOR PROPRIETARY
DEPUTY SUPERVISOR SERVICES
DEPUTY SUPERVISOR GOVERNMENTAL
FOREST LAND MANAGEMENT
LANDS
TIMBER SALES
MARINE LAND MANAGEMENT
ADMIN. SERVICES
MANAGEMENT SERVICES
ENGINEERING SERVICES
FINANCIAL SERVICES
FIRE CONTROL
GEOLOGY AND EARTH RESOURCES
PRIVATE FORESTRY AND RECREATION
ALLOCATION AND MANAGEMENT PLANS
PROPRIETARY
RESEARCH AND DEVELOPMENT
DISPOSAL SITES
OWNERSHIP AND SPECIAL STUDIES
USE AUTHORIZATION
SEAWEED
SHELLFISH AND SUBTIDAL

FIGURE 6-2

WASHINGTON DEPARTMENT
OF NATURAL RESOURCES

discussion of the Interagency Committee activities and the criteria used for site selection, see Section 6.1.3.

DNR considers the discussions and informal recommendations of the Committee, along with the comments of other agency representatives and individuals invited to the Committee meetings. Available scientific studies and data are also reviewed. DNR's procedures at this point are not well documented. In a few weeks, depending on the workload, Marine Lands Management Division of DNR then may decide to:

- Discontinue use of an existing site
- Relocate an existing site
- Seek renewal of an existing site
- Designate a new site.

6.1.2.2 Local Permit Application

For any of the latter three options, which are the most common alternatives, DNR must initiate the local permitting process by applying for a shoreline permit from the city or county government that has jurisdiction over the proposed site under the Shoreline Management Act, described in more detail in Section 6.1.3.2.

The application process includes completion of a standard State-wide application and an Environmental Checklist for activities like this one that require "environmental review" under SEPA. The permit application used for all types of shoreline permits requests the following information:

- Applicant's name
- Location of proposed activity
- Name of water area
- Current use
- Proposed use
- Nature of water or shoreline area

- Shoreline designation, according to the applicable Shoreline Management Plan (SMP)
- Site characteristics
- Source, composition, and volume of dredged or fill material.

The environmental checklist appears in Appendix B. Some of the important additional information it requires about environmental impacts is listed here:

- Deposition, siltation or erosion effects
- Discharges into surface waters
- Alteration of water quality
- Changes in diversity or numbers of species including microflora and aquatic plants
- Deterioration of habitat
- Release of hazardous substances
- Human health hazards or potential hazards

Completing the checklist requires more detailed evaluation and analysis than the permit application. There is no time constraint on the application process, which may take weeks to months.

The time element is important only in that local permits can be issued for a maximum period of five years. When reapplying for a local permit for an existing site, DNR must initiate Committee discussions and the reapplication process well in advance of the expiration date, where continuous use of the site is desired.

Upon completion of the environmental checklist, DNR, the local agency and other interested parties review the checklist to determine whether an environmental impact statement (EIS) will be required in accordance with the State Environmental Policy Act (SEPA). (See Section 6.1.5 for more explanation.) If an EIS is not required, a declaration of non-significance (DNS) is issued. If an EIS is required, a statement of significance is issued and an EIS is prepared. For purposes of this discussion, DNR's final application for a local shoreline permit, accompanied by completed environmental review documents, represents the end of the site selection process and the beginning of the local permitting process. Local permitting procedures, timing and criteria are discussed in greater detail in Section 6.1.3.2.

6.1.2.3 Management of Sites

After the local permit is obtained, DNR operates the designated site in accordance with its own regulations and any supplemental conditions that may be imposed by the local shoreline management permit. DNR has significant site management responsibilities, which include leasing the use of a designated site to dump operators, collecting lease fees, monitoring disposal activities, and penalizing unauthorized activities. Nevertheless, DNR relies on EPA Region X and the Washington Department of Ecology (WDOE) to determine which dredged materials are acceptable for open water disposal. This determination is usually made as part of the dredged or fill material disposal permit process under Section 404 of the Clean Water Act, which is discussed in Section 4 of this report.

DNR's current management role may change in the near future. On September 28, 1983, DNR proposed four alternative management strategies for consideration by the Interagency Committee. The strategies range from greatly increased DNR involvement in site management to decreased DNR involvement with greater exercise of local authority through the shoreline management permit. Highlights of each of the proposed management strategies are listed below.

(1) Maximum DNR Involvement: Under this option, DNR would still obtain a local shoreline management permit for each site, but would also:

- Review the characteristics of the material to be disposed of before issuing leases
- Monitor most disposal activities for compliance
- Fund research for impacts of disposal
- Raise lease fees significantly to support increased responsibilities.

(2) Increased DNR Involvement: This option is similar to (1) except that DNR would:

- Rely on EPA, WDOE and Corps review and approval of dredged material characteristics
- Cooperate with other agencies in funding research
- Raise lease fees less significantly.

(3) Current DNR Involvement: This option describes current management practices which differ from the above in that DNR only:

- Monitors for compliance on a spot-check basis
- Depends on research funded by others.

(4) Decreased DNR Involvement: Under this option, DNR's role in site management is substantially diminished. Procedures would be as follows:

- Disposal sites would be established by regulation, rather than by local permit
- Each use would require an individual local shoreline permit
- Monitoring would be done only by the permit issuing agency (Corps and/or local government)
- Disposal fees would be discontinued.

DNR has asked the Interagency Committee to evaluate these options and recommend a management approach at the next Committee meeting.

6.1.3 Coordination With Other Agencies

DNR is aided in the disposal site decision-making process by the Interagency Site Evaluation Committee. The local shoreline management agencies are also integral to the process. The following sections discuss their respective roles. In addition, the roles of several other agencies represented on the Committee are described at greater length.

6.1.3.1 The Interagency Open Water Disposal Site Evaluation Committee

The Interagency Committee was created by DNR regulations (WAC 332-30-166). It consists of representatives from the following eight agencies:

- U.S. Army Corps of Engineers - Seattle District
- U.S. Environmental Protection Agency - Region X
- National Marine Fisheries Service
- U.S. Fish and Wildlife Service
- Washington Department of Game
- Washington Department of Ecology
- Washington Department of Fisheries
- Washington Department of Natural Resources.

Committee members are chosen by the agencies they represent. Although specific individuals are the designated agency representatives, it is not uncommon for more than one person or an alternate to attend meetings in place of the designated representative.

The Interagency Committee's main role is providing scientific and regulatory advice to DNR. The Committee is a forum for discussing site characteristics, sharing scientific information, considering opinions of agencies not represented on the Committee, and recommending alternatives. Other regulators, local government officials, Indian tribal representatives and private citizens may be invited to attend meetings to present data, viewpoints, or background. After reviewing all information presented, the Committee makes informal recommendations to DNR. The following criteria from WAC 332-30-166 are used in preparing the recommendations:

(a) Select areas of common or usual natural characteristics. Avoid areas with uncommon or unusual characteristics.

(b) Select areas, where possible, of minimal dispersal of material rather than maximum widespread dispersal.

(c) Sites subject to high velocity currents will be limited to sandy or coarse material whenever feasible.

(d) When possible, use disposal sites that have substrate similar to the material being dumped.

(e) Select areas close to dredge sources to ensure use of the sites.

(f) Protect known fish nurseries, fishery harvest areas, fish migration routes, and aquaculture installations.

(g) Areas proposed for dredged material disposal may require an investigation of the biological and physical systems which exist in the area.

(h) Current velocity, particle size, bottom slope and method of disposal must be considered.

(i) Projects transporting dredged material by pipeline will require individual review.

(j) Placement of temporary site marking buoys may be required.

(k) Special consideration should be given to placing material at a site where it will enhance the habitat for living resources.

(l) Locate sites where surveillance is effective and can easily be found by tugboat operators.

Additional factors that may be considered beyond the regulatory guidelines include:

- Cost and feasibility of dredged material disposal
- Proximity of the site to pipeline, cable, or anchorage areas and transportation routes.

The Interagency Committee's recommendations may cover the same range of options as DNR's decision, including:

- Discontinue use of an existing site
- Relocate an existing site
- Seek renewal of an existing site
- Designate a new site.

The Committee also provides informal advice on political considerations, research needs, and site management issues.

6.1.3.2 Local Shoreline Management Agencies

In 1971 the State of Washington passed the Shoreline Management Act (SMA), RCW 90:58, to promote planning of shoreline uses, to promote developments dependent on shoreline use, to protect the environment, and to improve public access to shorelines. The Act established a cooperative management program between local governments and the State. Cities and counties in the coastal zone developed Shoreline Master Programs (SMPs) to guide shoreline uses and activities. These programs are implemented through a permit system that applies to marine waters, lakes greater than 20 acres, streams with a flow of 20 cubic feet per second, associated wetlands, and upland areas 200 feet from the ordinary high water mark. Local master programs for all cities and counties bordering Puget Sound have been reviewed and approved by WDOE and the State attorney general, and are now State regulations. Although localities have primary responsibility for the administration of the shoreline regulatory program, WDOE supports and reviews local actions to ensure compliance with State and local rules.

The SMA defines four types of land use designations for use in developing local SMPs: urban, rural, conservancy and natural. Some local governments have established additional designations (e.g., urban-residential) to further describe use availability. "Natural" areas are not available for disposal of dredged spoils.

SMPs also establish regulations concerning developments or activities on shorelines, and implement permitting programs to enforce these regulations. There are three types of permits:

- Substantial development permit - This permit is required for all developments that interfere with normal public use of waters or shorelines, or that are valued at more than $1,000.
- Conditional use permit - This permit is used to limit or condition ongoing activities at a development, and to allow flexibility in applying SMP rules.
- Variance use permit - This is used for developments or activities that require an exception from the SMP rules.

By definition, all areas of Puget Sound are under same local jurisdiction's Shoreline Master Program. Open water disposal is considered a "development" for the purpose of applying a SMP. Any site selected for open water disposal requires both a substantial development permit due to the size of the operation, and a conditional use permit because of the ongoing nature of dumping activities (as opposed to a finite period of construction). Local agency actions and permit decisions are reviewed by the Shorelines Division of WDOE (see Section 6.1.3.3).

When a local agency receives a completed application for a shoreline permit from DNR, public notice is given and a comment period follows. During the 30-day public comment period, the local agency reviews the application and accompanying environmental checklist in accordance with WAC 173-14-100, "Review Criteria for Substantial Development Permits," and WAC 173-14-140, "Review Criteria for Conditional Use Permits." Shoreline uses classified as "conditional" in the SMP may be allowed if the proposed activity meets the following criteria:

- Will be consistent with the Shoreline Management Act and the Shoreline Master Plan
- Will not interfere with normal use of public shorelines
- Will be compatible with other permitted uses in the area
- Will cause no unreasonable adverse effects on the shoreline environment
- Will have no substantial detrimental effect on the public interest.

Other uses not specified in the SMP may be authorized if extraordinary circumstances preclude reasonable use in a manner consistent with the SMP. WDOE guidelines for development and approval of SMPs (WAC 173-16-060-16) require that local plans address open water disposal of dredged material, which is allowed only for habitat improvement, to correct problems of material distribution that adversely affect fish and shellfish, or where the land disposal alternatives are more detrimental to shoreline resources. There is no limit in practice on the amount of time allowed for this review by the local agency.

After reviewing the application and public comments, the local agency may:

- Deny the permit
- Approve the permit without restrictions
- Approve the permit with conditions such as time limits, volume limits, monitoring requirements, or individual dump approvals, depending on the local SMP.

The local agency must file its ruling with WDOE and the State Attorney General within eight days of the decision. The State's review is discussed next.

6.1.3.3 Washington Department of Ecology (WDOE)

The Management Section of the Shorelines Division of WDOE has 30 days from the date of receipt to review the local permit decision (WAC 173-14-130). Normally, only approvals are reviewed. Local denials are considered final at this stage. WDOE reviews the application and accompanying documents to ensure that the permit was issued properly and that the decision is consistent with the local Shoreline Master Program. The Attorney General also reviews the decision for consistency.

Due to limited resources, the Shorelines Division concentrates its efforts on the review of Conditional Use Permits and Variance Permits. Less time is spent on the review of Substantial Development Permits unless the proposal is controversial. WDOE's final review decision can take one of three forms:

- Approval
- Approval with conditions (with the concurrence of the local agency)
- Appeal to the Shorelines Hearing Board.

This decision is returned to the local government, which is in turn responsible for notifying interested parties.

The applicant, or any other person or agency in disagreement with the final decision, may seek WDOE certification for review by the Shorelines Hearing Board. A request must be filed within 30 days of receipt of the final decision. The Shorelines Hearing Board consists of State government officials and representatives from the Washington Association of Cities and the Washington Association of Counties. The Board can make decisions based on both SEPA and SMA issues. Reviews are conducted on a case-by-case basis, without reference to prior decisions. Appeals beyond the Board may be taken to the Washington State Superior Court.

6.1.3.4 Washington Departments of Fisheries (WDF) and Game (WDG)

WDF and WDG administer the Hydraulic Project Act, RCW 75.20.100, through regulations contained in at WAC 220-110. A "hydraulic project" means construction or other work that will use, divert, obstruct, or change the natural flow or bed or utilize any waters of the State. All hydraulic projects, including open water disposal sites, require a Hydraulic Project Approval (HPA). A HPA is a written, signed approval from both departments that provides conditions for the protection of fish life. It is valid for twelve months unless reauthorized. The departments use a standard HPA application which includes plans and specifications. If the application is complete and SEPA requirements have been met, the permit can be processed within 30 days. Each approval is specific to a location. The departments may place general, technical, and special conditions in a HPA. Examples include:

- Timing restrictions to protect fish during periods of migration or spawning
- Operational or technological restrictions to minimize siltation or impacts to biota
- Area restrictions to protect fish habitat or spawning areas.

Violation of HPA conditions is a gross misdemeanor punishable by fine or imprisonment.

WDF and WDG are both members of the Interagency Committee and are informed of site designation decisions. Since there is extensive coordination, the approval of an open water disposal site as a hydraulic project, may be implicit in the Departments' sanctioning of and participation in the Committee's recommendation to DNR. If this is true, the written HPA, with any conditions, is a formality which should not impede the decision-making process.

6.1.3.5 EPA and the Corps of Engineers

Under the dredge and fill permit regulations, 40 CFR 230.80, EPA and the Corps of Engineers may identify areas that will be considered as possible future disposal sites or that are unsuitable for such designation. The agencies or another party may initiate this procedure, which must be done in consultation with the State. This "advance identification" does not allow or prohibit discharge of dredged material at these sites but only facilitates 404 permit application and processing. This activity which may be conducted by EPA and the Corps is consistent with their roles on the Interagency Committee. Further, the Corps uses DNR designated sites when issuing 404 permits and for most of its own dredging activities. However, the Corps participates in this process by policy, not by mandate, and may use other sites in certain situations. Corps' dredging activities must comply with Sections 404 and 401 of the CWA and the CZMA, to the maximum extent practicable. Corps projects do not require site use permits or lease fees.

6.1.4 Public Input

During the Interagency Committee meetings overseen by DNR, public input is provided only informally. City and county officials, representatives of interested agencies or Indian Tribal governments, or members of the public are often invited to meetings for informal discussion or for advance notice of an impending action.

No formal public notice of site designation is required until DNR applies for a local shoreline permit. At that time, DNR must publish notice in a newspaper of general circulation within the geographical area of the proposed development at least once a week for two consecutive weeks on the same day of the week. Reasonable notice must be given to adjacent property owners by mailing or posting near the site. Individual SMPs may require more frequent notices.

The notice must state that interested persons may submit written comments within 30 days of the final newspaper notice, and may request individual notice of the final decision. WDOE procedural regulations (WAC 173-14-080) provide for optional public hearings at the local level as part of the shoreline permit process. A hearing may be required under an approved local SMP if a request is made during the comment period. The hearing would be held prior to the final local permit decision.

After a decision on a local permit is issued, WDOE reviews the decision. During this period, a review by the Shorelines Hearing Board may be requested by any interested party. The request must be filed with WDOE within 30 days of WDOE's receipt of the local decision. WDOE will certify the request for review within 30 days if it appears to have merit. If WDOE does not certify the request, the requestor may seek certification from the Attorney General or review by the Superior Court. The rules of practice of the SHB are established by law in RCW 90.58.180, and by regulation in WAC 461-08.

6.1.5 Environmental Review Under SEPA

The State Environmental Policy Act (SEPA), RCW 43.21C, requires local governments to assess the environmental impacts of proposed developments, including the designation of an open water disposal site. To fulfill the requirements of this environmental review, the applicant for a proposed project completes an environmental checklist (included as Appendix B) along with a shoreline permit application. Although any regulatory agency involved in a development can request a checklist, a "lead agency" is normally established to oversee the entire environmental review process. In this case, the lead agency is DNR because it is a government applicant and it has jurisdiction over open water disposal sites. The completed checklist provides State and local reviewers with a preliminary determination of the environmental impact of the proposed activity. Based on the review of the checklist and SEPA procedures, an environmental impact statement (EIS) may be required.

The environmental review begins during the 30-day public comment period. If an EIS is not warranted, based on this review, a Declaration of Nonsignificance (DNS) is issued by the lead agency, and circulated among parties of record, other agencies with jurisdiction, public interest groups, and the general public. Fourteen days are then allowed for public comment, at which time the DNS may be challenged.

If an EIS is required based on the checklist, a Declaration of Significance is prepared and circulated. This decision cannot be appealed. In the case of open water disposal site designation, DNR will prepare the EIS and serve as the lead agency. The draft EIS may take from several months to years to prepare. Upon completion, it is distributed to interested parties for a 35-day comment period. All comments regarding environmental effects and alternatives to the proposed activity must then be addressed in a final EIS. After consideration of the final EIS, the local agency begins the final permit decision process described earlier.

6.2 DISCUSSION OF OBSTACLES TO DECISION-MAKING

This section discusses the technical, administrative and statutory or regulatory obstacles to the site selection, designation and management process. Conclusions are presented in Section 6.3.

6.2.1 Technical Obstacles

Two types of concerns are discussed as "technical obstacles:" lack of information and lack of coordination. However, it should be clear that these are related to the issues raised in other sections, too.

6.2.1.1 Lack of Information

Lack of data is cited as the main obstacle to informed selection and management of open water disposal sites. Although information concerning bioassays, toxicity, and impacts of disposal of dredged spoils has been collected by the Corps and others, complete data are lacking for specific sites in Puget Sound. Ongoing research programs conducted by NOAA, EPA, and WDOE are producing information about pollutants locations, concentrations and toxicity. However, to make wholly informed decisions about specific sites, regulatory agencies must know more about:

- The physical/chemical behavior and dynamics of the site, and materials dumped there, including the rate of settling and resuspension of sediments, rate of exchange between the dissolved and suspended form of pollutants in the water column, synergistic effects of pollutant combinations, and degradation rates of contaminants
- The ecological characteristics of the site, including exposure pathways in the water column and sediment, bioaccumulation pathways, and biological uses of the site
- The characteristics and discharge rates of materials to be disposed of at the site including volumes, concentrations and availability of pollutants of concern.

A major concern is the possible link between dredge spoil discharges and deleterious effects on the biota. An understanding of the relationship of this disposal activity to all other pollutant sources and their interaction in the overall transport and persistence of contaminants within Puget Sound is also needed. The many unknowns make decisions on acceptability of materials for open water disposal difficult and subject to professional judgements in many cases.

New, changing information can also be an obstacle when environmental studies show that problems previously considered significant are less important in relation to newly discovered problems. Ongoing research programs designed to study one problem often uncover evidence of new, poorly understood problems. For example, in various environmental programs, including the site designation process, attention has shifted from conventional pollutants to toxic metals, toxic organics, and synergistic effects of contaminants. Also, in the Sound water quality concerns have expanded to include sediment quality. Overall, research efforts often lag behind regulatory needs and decisions are made with incomplete information.

A historical perspective on "informed selection" must also be noted. DNR established the Interagency Committee and the review criteria by regulation in 1980. However, most of the existing open water disposal sites have been in use for a decade or more. Before ten years ago, open water dumping occurred wherever it was convenient. Fishing grounds and feeding habitat were being destroyed. An advisory group was set up to consolidate dumping activities to a few sites. The group established some general selection criteria, discussed the issues, and then compromised. Proximity of sites to dredging activities and experience were important considerations.

Although the historical decision-making process relied on similar interagency discussions and guidelines, it was less formal and rigorous than today's process. More is now known about sites and impacts and criteria are more formal since codification. However, this historical process still has a direct effect on today's decisions, which usually involve redesignation of an old site, rather than selection of new sites based on new criteria.

Although it is not necessarily done in a rigorous fashion for each site, the environmental checklist prepared during application for a local shoreline permit requires evaluation of data on water quality, sediments, benthos, pelagic life, and long-term effects of dredged spoil discharges. These topics can be investigated in greater detail during preparation of an EIS. Practices for newly designated sites should include even more baseline monitoring to document existing conditions, and follow-up monitoring to determine whether sediments are moving or spreading. Although the regulations governing ocean dumping (40 CFR 227, 228) do not apply in Puget Sound, they could be used as guidance in designing monitoring programs. Because the application process must be repeated every five years, the shoreline permit also provides a mechanism for acquiring and considering new information. This periodic review allows local governments to evaluate new information which support establishment of conditions on site use or termination. This local permit provides a tool for reevaluating past decisions and guiding efforts toward better decisions in the future.

Two of DNR's recently proposed management alternatives would generate increased fees to fund monitoring and research. Either approach will improve DNR's ability to collect information necessary for informed decision-making.

6.2.1.2 Lack of Coordination Between Site Selection and Disposal Activities

Existing technical problems are exacerbated by the lack of regulatory coordination between the site designation process, administered by DNR, and the dredge and fill permitting program, administered by the Corps, EPA and WDOE. During its designated life a site may be used for disposal of materials from a variety of locations. The existing criteria used by DNR to select sites do not require detailed information on the quantity and quality of materials to be discharged at a site.

As part of the dredge and fill program, the Corps, EPA and WDOE decide, independently of the site selection process, which dredged materials can be disposed of in open water using the 404(b)(1) and 401 criteria of the CWA. DNR presumes that all material determined to be "suitable" for open water disposal is reasonably uncontaminated, and will not degrade the marine environment.

With chemical analysis however, it has become clear that some materials classified as suitable are more contaminated than others. For example, dredged spoils from urban or industrialized river and harbor areas are typically contaminated with heavy metals or organic pollutants. Thus, disposal sites located near urban areas may be concentrating these contaminants. Uncontaminated dredge dumped at sites in undeveloped areas may simply reflect redistribution of naturally occurring materials.

At a recent Interagency Committee meeting in September 1983, members were asked to comment on a proposal to designate different disposal sites for different types of materials. Recognition of the need for this distinction may be a step toward a solution. To answer this question properly, effort must be put into determining whether relatively contaminated materials can be dumped in the Sound in some location where they are relatively contained and adverse effects are minimized perhaps by capping of the site by natural sedimentation processes or man-made means. A decision to designate different types of sites would probably be accompanied by development of criteria to distinguish between materials that are "suitable" and those that are "contaminated, but acceptable." Consideration of upland alternatives to open water disposal could also tie into this process.

6.2.2 Administrative Obstacles

Four issues are discussed in this section as examples of problems or potential concerns related to administration of the open water disposal site program. They are:

- Resources
- Management
- Delays
- Complexity.

6.2.2.1 DNR Resources

DNR's Marine Lands Management Division lacks the staff and resources to manage rigorously the site selection and leasing program. Activities necessary for an effective management program include:

- Monitoring site use for compliance with Federal or State conditions
- Monitoring for compliance with restrictions imposed by local agencies
- Encouraging complementary actions by other agencies
- Monitoring the activities of other agencies
- Monitoring long-term effects at the site and relating this data to other monitoring efforts in the Sound

- Funding studies of transport and impact of materials at the site and linkages to other discharges
- Developing innovative approaches to site management.

There is a perception that DNR could be more aggressive in its regulatory approach, for example, by monitoring site use and permit compliance.

DNR's current lease fees for disposal activities do not provide sufficient resources to fund operation of sites, let alone monitoring and research or encouragement of alternatives. There is intermittent spot checking of dump operations but no long term monitoring at the disposal sites. Two of DNR's proposed management alternatives provide increased fees which could increase long-term monitoring at sites and enforcement, which is not conducted by any agency now, even those involved in permitting. Another of the management alternatives would eliminate lease fees altogether, thus exacerbating an existing problem.

6.2.2.2 DNR Management

DNR has proposed alternative management strategies ranging from increased involvement in site management to virtual withdrawal from it. Only two of these would result in a stronger regulatory program. One of the proposed alternatives would substantially remove DNR from the process and substitute local control through the shoreline permit program. This approach could result in a more fragmented regulatory program and greater risk of environmental damage. Even under this alternative, however, an effective program could still evolve. As oversight agency for the shoreline permit program, WDOE could impose a coordinated site management program through revisions to SMP guidelines and review of individual permit decisions. This approach is not envisioned at this time.

Two of the proposed strategies would result in a stronger regulatory program for managing open water disposal sites. An expanded role for DNR in coordinating the review of individual dredge disposal permits, as proposed, would integrate regulation of disposal activities with the site designation process. It would enhance compliance monitoring and promote research, too. This stronger central presence has the advantage of preventing proliferation of local conditions designed to counterbalance a weak regulatory program. However, DNR's participation in evaluating other agencies' determinations of acceptability has disadvantages, too. An additional review would not increase knowledge of the unknown or long term fate and effects of contaminants at disposal sites; it would merely add delays and redundancy. DNR can effect the proposed improvements through minor management or regulatory changes. It is more difficult for Federal agencies to assume a larger role in this process.

6.2.2.3 Delays Due to Local Agency Involvement

DNR can designate and operate open water disposal sites only with the consent of the local government that issues the shoreline permit. Local review, public notice, and decision-making procedures coupled with the WDOE review and the SHB appeal process can result in extensive administrative delays in designating a new site or renewing an existing one. Delays in obtaining site approvals or renewals can be expensive for the private or public concerns that must postpone dredging activities.

6.2.2.4 Complexity Due to Special Permit Conditions

In recent years, some localities have imposed additional restrictions on site use through Conditional Use Permits. Examples of conditions include:

- Time limits
- Volume restrictions
- Monitoring requirements
- Separate approvals for individual dumping activities.

These special conditions are difficult to monitor and enforce, may decrease site availability, and may increase delays in obtaining approvals for individual projects. If local involvement in site management increases because of implementation of one of DNR's proposed management alternatives, this obstacle will increase, too. On the other hand, localities can use this mechanism to provide additional safeguards, if they perceive that Federal or State efforts are inadequate to protect their interests. Greater local participation will ensure greater recognition of local concerns.

In addition to more stringent permit conditions, increasing local concern over activities at these sites could lead to exclusively local dumping, if local governments use their permit authority to systematically deny dredged materials from other jurisdictions. Each jurisdiction denied access could petition DNR for its own site, thus proliferating sites.

While this result is undesirable, it is also unlikely for two reasons. First, the Interagency Committee was established to constrain dumping to a few dedicated sites. Second, State law requires an "appearance of fairness" in decision-making. If similar materials from different jurisdictions were not allowed at the same site, WDOE or the Shorelines Hearing Board could intervene in the process. The fact that this possibility exists, though, emphasizes the need for active State involvement in regulating the type, quantity, and location of open water dumping -- not to deny local involvement but to allay local concerns.

6.2.3 Statutory/Regulatory Obstacles

The two issues discussed in this section are considered statutory or regulatory because of the types of approaches that would be needed to modify the existing situation.

6.2.3.1 Five-Year Permit Limits

The Shoreline Management Act imposes a five-year limit on locally issued permits. This necessitates frequent repetition of the entire decision-making process. On the administrative side, this regulatory requirement may be seen as causing duplication and delays. On the other hand, though, the Shoreline Management Act is the only law that provides formal public input to the decision-making process. Without this public access, there would probably be a greater incidence of public controversy and legal challenge through the courts. Consideration of public comments through this formal, mandated process may ultimately save time. This regular review of the site designation decisions also provides local governments with an opportunity to evaluate new information as it arises and to impose "five-year plans" through local permit conditions, even if a concerted regulatory effort is lacking.

6.2.3.2 Shortage and High Cost of Upland Disposal Alternatives

The shortage of economical upland disposal sites for solid waste in the Puget Sound area, especially in urban areas, combined with continued demand for dredging to support economic growth create a substantial need for open water disposal sites. Demand for adequate disposal sites is increasing at the same time scrutiny of existing sites by regulators and the public is increasing. When dredged materials are determined to be unfit for open water disposal they may be only slightly contaminated but they still must be disposed of in some way.

As an example of these limitations in urban areas, both the City of Seattle and King County operate landfills through solid waste utilities. Telephone contacts with these utilities revealed that solid waste is accepted at a cost of $12.85 per ton at Seattle's landfill, and $26.50 per ton at King County's regional landfill. As mentioned in Section 4, DNR charges $0.10 per cubic yard of dredged material at open water disposal sites. Assuming that the weight and volume of water approximate those of dredged spoils, these costs can be translated into comparable figures.

A cubic yard of water weighs .842 of a ton.* Using this conversion, it would cost $10.82 per cubic yard to dispose of water at Seattle's landfill, and $21.31 at King County's. Assuming dredged material is at least as heavy as water, upland disposal would be over 100 times more expensive than open water disposal.

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*From the Water Measurement Manual, U.S. Department of Interior, Bureau of Reclamation, 1967:

$$1 \text{ yard}^3 \times \frac{27 \text{ feet}^3}{1 \text{ yard}^3} \times \frac{1 \text{ gal.}}{.13368 \text{ feet}^3} \times \frac{8.34 \text{ lbs.}}{1 \text{ gal.}} \times \frac{1 \text{ ton}}{2000 \text{ lbs.}} = .842 \text{ ton}$$

Even if cost factors could be ignored, it is not clear that dredged materials would be accepted at existing landfills. The Seattle/King County Health Department regulates the quality of materials allowed at landfills (Wally Swofford, Health Department personal communication). Both solid waste utilities also regulate the quantity and type of materials accepted at their landfills. The dredged materials being discussed here are contaminated at levels far below that considered "hazardous." However, Health Department rules or local prohibitions on wet or liquid materials may prevent their disposal at landfills. Capacity is also a factor in that acceptance of new types of wastes could decrease the expected usable life of the landfills. Seattle projects that current use rates will fill all its landfill capacity in three to five years (Jack Palmer, Seattle Solid Waste Utility, personal communcation).

If disposal sites cannot be found locally, other options must be considered. Although there is a hazardous waste disposal site in Arlington, Oregon, it is even more expensive to transport dredged sediments there. Also, pollutant levels in most of the "contaminated" dredged sediments are not high enough to be considered "hazardous wastes."

As the shortage of upland disposal sites becomes more severe, there will be limited alternatives:

- Stop dredging contaminated areas, where economic activity depends on dredging
- Dump more and more contaminated material into Puget Sound, perhaps capping the material with cleaner sediments
- Find upland sites which are more costly.(66J)

In addition to the shortage of sites, DNR's currently low lease fee favors open water dumping and discourages consideration of upland alternatives. DNR's management proposals, which could increase or decrease lease fees, bear on this issue. Although DNR's proposals have not been refined to the level of specific values for the new lease fees, several statements can be made. Discontinuing lease fees seems inconsistent with the "public trust" concept, which states that "fair market values placed on these lands [managed by DNR] will result in better land use decisions" (WAC 332-30-100). On the other hand, raising lease fees could make open water disposal more realistically priced in relation to upland alternatives. Further, raising lease fees substantially could encourage consideration of some upland alternatives that are prohibitively expensive at current lease fees.

Difficult decisions will have to be made within the next few years. Although a regional approach to solid waste management has been proposed, there has been little action toward developing a solution.

6.2.4 Public Input Considerations

Public comment and review may cause delays in the decision-making process. Public perception may link one decision or activity to another and support or oppose both for uninformed reasons. Also, one segment of a community may be more vocal because of proximity or perceived threat of an activity.

6.3 CONCLUSIONS

DNR's proposal to change the management structure of its open water site designation and leasing program is a key issue in future decision-making. Currently, DNR allows the Corps, EPA, and WDOE to decide which materials are acceptable for dumping, with no independent review. DNR also does virtually no compliance or long-term monitoring of sites and requires none. Increasing DNR's role would help in orchestrating monitoring activities. However, DNR's involvement in acceptability determinations would likely add a layer of review and delay without improving evaluation procedures or technical understanding of unknowns. The options decreasing DNR's role would continue this situation or make it worse.

The Interagency Committee has a major role in site designation, but there is no formal product of its activity and historical events may influence today's decisions. Decisions usually involve redesignation of sites that have been in use longer than the regulatory programs meant to control them. Regulators are not necessarily choosing the "best" open water disposal sites based on scientific evidence, but may be choosing to continue using existing sites based on historical practice, lack of alternatives, lack of information and desire not to contaminate other sites.

The local shoreline permit program provides for routine, public reevaluation of site selection decisions and review of new information. Increasing local involvement could lead to more stringent permit conditions, site use restrictions, or proliferation of sites, making management more difficult. This provides an incentive for active, responsible State management to allay local concerns. The shoreline permit also provides a failsafe mechanism whereby WDOE or local agencies can intervene if EPA, the Corps, or DNR do not properly regulate and monitor open water disposal of dredged material in Puget Sound.

Alternatives to open water disposal of dredged material are urgently needed. Increased DNR lease fees may encourage consideration of upland sites in individual cases. However, a regional approach, involving Federal, State, and local governments, is needed to provide a long-term solution to the continuing need for disposal of solid waste.

Research is needed to link disposal activities to effects on biota, overall impacts of other pollutant sources, and long-term effects on Puget Sound. DNR's lease fees could provide funds for continuing research by NOAA, EPN, WDOE, and others. Also, the five-year shoreline permit provides a mechanism for directing research at specific sites in step-wise increments. A research effort implemented in this way by a central authority, DNR or WDOE, could be well coordinated and managed. If implemented by local governments with incomplete perspectives and parochial concerns this type of research effort would not solve existing problems.

7. REDESIGNATION OF THE FOURMILE ROCK OPEN WATER DISPOSAL SITE

"Fourmile Rock" is the name of a designated dredged material disposal site located in deep water in the Central Basin of Puget Sound. As Figure 7-1 indicates, it is slightly north of the entrance to Elliott Bay and southwest of Westpoint. The Washington Department of Natural Resources (DNR) manages and leases use of the site, which serves dredging projects in Seattle and King County.

As discussed in Section 6, the need for disposal sites is created by dredging to support economic growth and lack of upland landfill capacity. These factors are all accentuated in Seattle and King County, the economic center of the State. All the government agencies involved agree on the need for continued disposal of dredged materials at a site accessible to this urban and industrial area.

The Fourmile Rock site is within the jurisdiction of the City of Seattle's Shoreline Master Program. Seattle initially issued a five-year shoreline permit to DNR for the Fourmile Rock site in 1978. In the summer of 1983, the City granted a one-time, one-year extension of the permit as allowed by State law. At the end of this period the City will be faced with considering permit re-issuance for the disposal site.(66I)

Recent studies indicate that the site is contaminated with heavy metals and toxic organics. Although concentratons of pollutants in the water column are localized and transient because of dilution, other sampling studies have shown bioaccumulation in plankton and elevated levels of organic compounds in sediments collected at the disposal site.(14,28,29) Also, actual disposal operations at an open water disposal site can smother indigenous invertebrates and influence other aquatic fauna at a distance from the site due to redistribution of material by currents.(67) Furthermore, sediments dumped at the site in the future are likely to be contaminated because many dredging projects that use the site for disposal involve maintenance or improvement of navigation channels, port facilities, and industrialized shipping and berthing

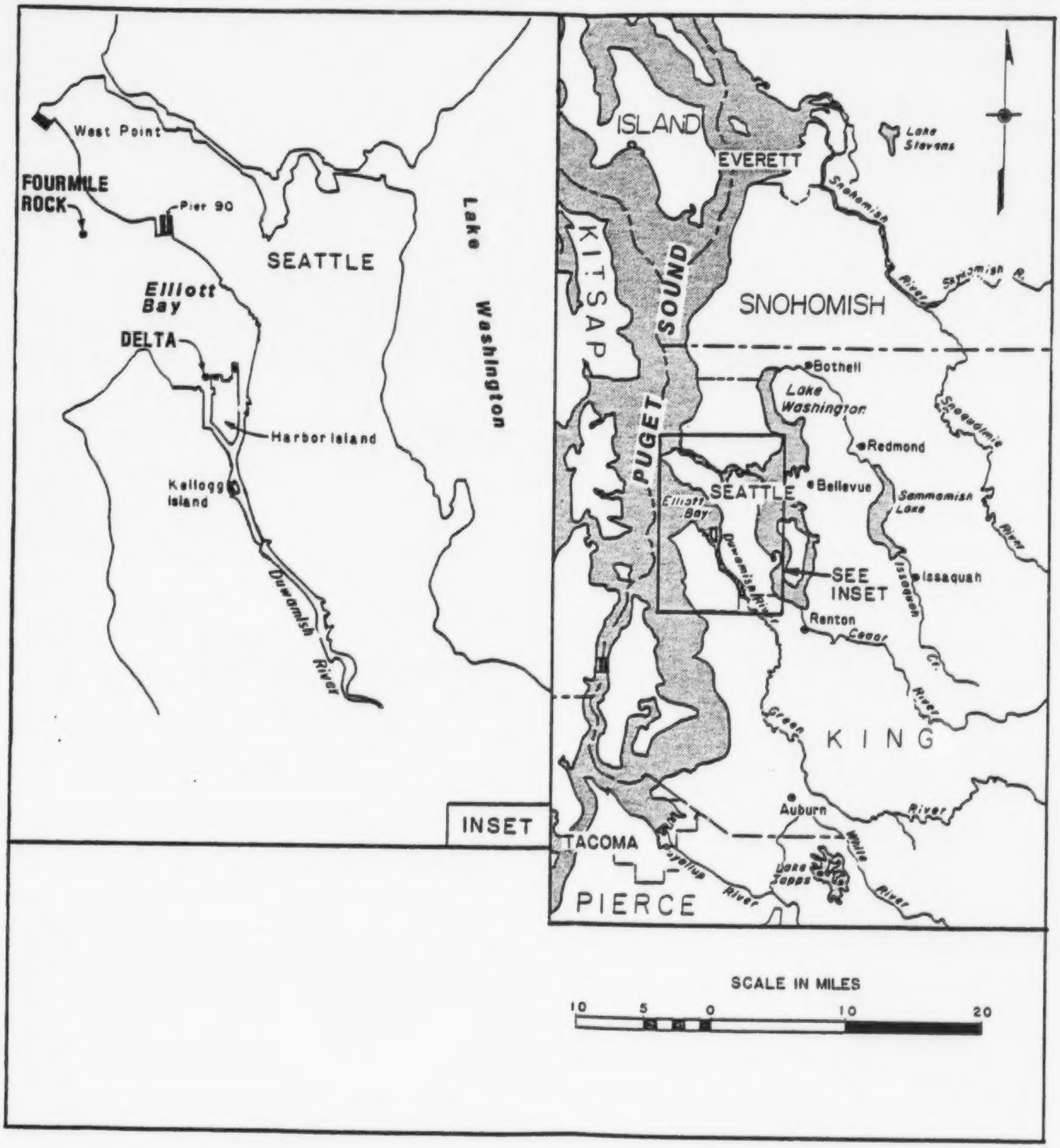
West Point
FOURMILE ROCK
Pier 90
SEATTLE
Elliott Bay
DELTA
Harbor Island
Kellogg Island
Duwamish River
Lake Washington
INSET
ISLAND
EVERETT
Lake Stevens
KITSAP
PUGET SOUND
SNOHOMISH
Snohomish River
Skykomish R.
Bothell
Lake Washington
Redmond
SEATTLE
Elliott Bay
Duwamish River
Bellevue
Sammamish Lake
Snoqualmie River
SEE INSET
Issaquah
Issaquah Cr.
Renton
Cedar River
Green River
KING
Auburn
White River
TACOMA
Puyallup River
Lake Tapps
PIERCE
SCALE IN MILES
10
5
0
10
20

FIGURE 7-1

MAP OF SEATTLE AREA SHOWING DUWAMISH RIVER, ELLIOT BAY AND FOURMILE ROCK OPEN WATER DISPOSAL SITE

Source: Final Feasibility Report and EIA. East West Duwamish Waterways Navigation Improvement Study. US.C.O.E., Seattle District, January 1983 areas. The City of Seattle has formed a Study Task Force to get a better understanding of these issues in preparation for the shoreline permit decision which must be made in the summer of 1984.

Because of these environmental concerns and the demand for this site, Fourmile Rock was selected as a specific example of the general designation process discussed previously. In Section 6 of this report, the relevant agencies are introduced and their responsibilities outlined. This section describes the specific decisions and procedures that will be used by the Interagency Committee, DNR, the City of Seattle, and other agencies in the case of the Fourmile Rock Disposal Site permit re-issuance.

7.1 THE DECISION-MAKING PROCESS

The decision-making process for the Fourmile Rock site will follow the general pattern described in Section 6. This section presents more specific details and distinguishes decisions or processes that have occurred from those still needed.

Because DNR's activities and decisions are intertwined with those of the Interagency Committee, the two are discussed together in Section 7.1.1. The City of Seattle is introduced as an important new decision-maker in 7.1.2. The City is the local shoreline managment agency with jurisdiction over Fourmile Rock. Although much of the material pertains to Seattle's decisions and opinions, environmental review and the SEPA process are presented in 7.1.3. WDOE and SHB involvement are discussed in 7.1.4.

7.1.1 DNR and the Interagency Committee

It is difficult to determine whether DNR directs the Committee or acts as a result of Committee discussions and suggestions. The Interagency Committee has been considering Fourmile Rock redesignation issues for over a year. Scientific and political advice has been requested from NOAA's Pacific Marine Environmental Laboratory, Seattle's Task Force on the Fourmile Rock Disposal Site in Puget Sound, and other agencies and concerned parties. The Committee and DNR have expressed interest to the point of soliciting pre-application information about local requirements for shoreline permit application and approval. A City representative presented Seattle's requirements for local shoreline permit renewal and environmental review at the Committee meeting on September 28, 1983. Furthermore, no alternative sites have been proposed during this period of deliberation.

Although Seattle's permit and environmental review criteria may cause reconsideration, these points seem to indicate that DNR plans to apply for a local shoreline permit to reauthorize the Fourmile Rock site. An official decision will become available when DNR begins the permit application process by completing a shoreline permit application and environmental checklist. Seattle's shoreline master program procedures, timing, and criteria are discussed next.

7.1.2 City of Seattle

This section describes the City of Seattle's shoreline management program and its permitting procedures. Public notice requirements are also discussed.

7.1.2.1 The Seattle Shoreline Master Program

The Seattle Shoreline Master Program (SSMP) is set forth in Chapter 24.60 of the Seattle Municipal Code.(44) It is also incorporated in Chapter 173-19 of the Washington Administrative Code because the SSMP implements the State Shoreline Management Act of 1971. Seattle has primary responsibility for implementing the regulatory program of the SMA locally. As a part of the State Code, the SSMP has significance beyond its role as a zoning code and its purpose differs from the rest of Seattle's zoning code. That purpose is to implement the policy and provisions of the SMA by regulating shorelines to:

- Preserve, enhance, and increase views of and access to the water
- Encourage water-dependent uses
- Provide for maximum public use and enjoyment of the City's shoreline.(20)

The City's Department of Construction and Land Use (DCLU) (see Figure 7-2) implements and manages the SSMP through the "Master Use Permit" system.

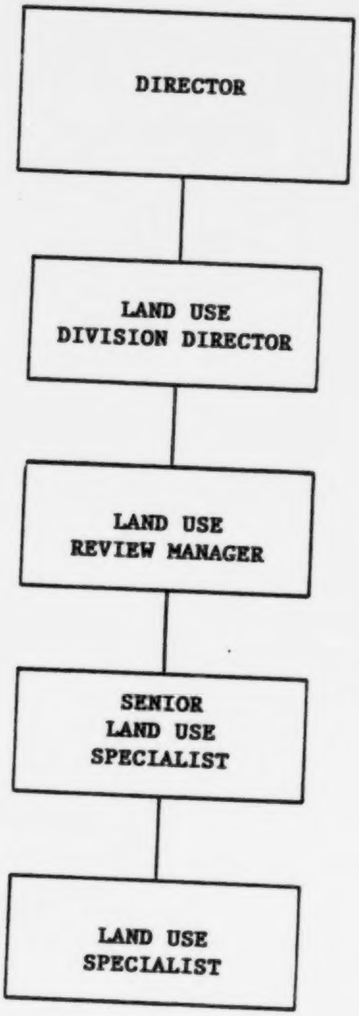
DIRECTOR
LAND USE DIVISION DIRECTOR
LAND USE REVIEW MANAGER
SENIOR LAND USE SPECIALIST
LAND USE SPECIALIST

FIGURE 7-2

CITY OF SEATTLE
DEPARTMENT OF CONSTRUCTION AND LAND USE
(only relevant units shown)

The SSMP divides the shoreline area under its jurisdiction into seven environment classifications designated as:

- Conservancy-Natural
- Conservancy-Management
- Urban Residential
- Urban Stable
- Urban Stable-Lake Union
- Urban Stable-Central Waterfront
- Urban Development (SSMP 24.60.325).

These classifications are significant in that they establish the management objective for each area.

The Fourmile Rock disposal site is located in a Conservancy-Natural area. The SSMP also designates areas of Puget Sound that are seaward of the line of extreme low tide as "shorelines of statewide significance" (SSMP 26.60.305). Only certain activities and use designations are allowed by the SMA for shorelines of statewide significance. Fourmile Rock is an area of statewide significance by this definition.

The SSMP regulations are quoted here to explain the purpose of the Conservancy-Natural (CN) environment:

> A. Within a city as highly urbanized as the City of Seattle, natural areas are very few, small, and extremely difficult to preserve; yet if the quality of life for future generations is to be maintained, a significant part of that quality will relate to the existence and use of natural areas.
>
> B. The emphasis in the CN shoreline environment is on preservation and restoration of natural systems and resources; and on prevention or regulation of uses or activities that would degrade the natural environment. Any proposed activity that would change the existing situation would be desirable only if it further enhances, restores or preserves the natural character of the area so classified.

C. The purpose of the CN shoreline environment designation is to preserve, regulate or restore an area to its natural state, as nearly as possible without human influence. Within such areas, only activities which further, preserve, enhance or restore the existing natural geological, biological or hydrological conditions will be permitted, such as: feeding, habitat improvement, ecological observation and study or research, or other closely related activities.

D. Access by the public to land area in CN environments will be limited to natural trails, observation points, or special activities in limited locations related to the specific area and its unique qualities. Recreational use of CN designated land areas is intended to be passive and generally noninteractive with the environment. Active recreation, navigation, or landing and take-off of seaplanes may be prohibited in specific water areas in this environment. The CN environment will also be used to designate a particularly biologically or geologically fragile aspect of a geography and will therefore indicate a requirement of any prospective user to provide evidence of minimal impact (including adequate exploration of alternative designs and strategies) to both that area and to the environment in general (SSMP 24.60.330).

In addition, under a SMP, the specific activity undertaken is significant. Open water disposal sites are considered "developments" requiring a substantial development permit. Under the Seattle SMP, open water disposal of dredged material is also considered a "landfill," which means "sand, soil, gravel, or other material deposited onto a wetland area, or into the water over a submerged area" (SSMP 24.60.086). The SSMP regulations (24.60.730) also state that landfill for natural beach protection in the Conservancy-Natural environment is permitted as a "special use." Landfill that reduces the area of the water's surface is prohibited. All other landfill including dredge disposal is a "conditional use" in the CN environment. Solid waste such as broken concrete, building debris, appliances, car bodies, vegetation, flammable material, or water soluble and/or toxic waste are prohibited as fill material on both wetlands and submerged lands.

7.1.2.2 SSMP Permit Procedures

An application for an open water disposal site represents a landfill development in a Conservancy-Natural environment and a shoreline of statewide signifance, and requires a substantial development and a conditional use permit from Seattle's Department of Construction and Land Use. Only one

"Master Use and Construction Permit Application" is needed for such a dual permit.

DCLU encourages applicants to have a pre-application conference. Consultation with a City land use specialist often results in streamlined processing of applications.(10) Although not formally announced as such, a pre-application conference on the Fourmile Rock site has occurred. On September 28, 1983, a Senior Land Use Specialist from DCLU spoke at a meeting of the Interagancy Committee and presented Seattle's requirements for permit renewal at the site. The DCLU representative also discussed environmental review requirements.

Upon receipt of the DNR's application, the Seattle DCLU would assign a Senior Land Use Specialist to review it. The SEPA environmental review process and the Master Use Permit application decision-making process occur simultaneously. DCLU would use the general procedures and criteria described in Section 6.1.3. The Senior Land Use Specialist would also use some criteria specific to the SSMP in reviewing the application and accompanying documents. A substantial development permit is issued only when the development proposed is consistent with the Shoreline Master Program of the City, including shoreline goals and policies, and the provisions of the SMA. The applicant has the burden of proving that the proposed substantial development is consistent with these criteria. Uses identified as shoreline conditional uses, may be authorized in specific cases upon approval by WDOE if the request complies with the criteria mentioned in Section 6.1.3.1. The following general criteria excerpted from the SSMP, some of which apply to developments in shorelines of statewide significance, must also be met:

- All proposed developments must conform to permit requirements of all other agencies having shoreline jurisdiction or responsibility
- All proposed developments must conform with applicable Federal, State, and local regulations relating to air and water quality and noise pollution
- The proposed development must satisfy any substantive requirements of the State Environmental Policy Act

- Uses are preferred in the following order:
  - Water-dependent
  - Water-related
  - Non-water-dependent or non-water-related with regulated public access
  - Non-water-dependent or non-water-related without regulated public access
- Applications for permits on shorelines of statewide significance are evaluated in accordance with the principles outlined below and the guidelines in WAC 173-16-040(5):
  - Recognize and protect the statewide interest over local interest
  - Preserve the natural character of the shoreline
  - Result in long-term over short-term benefit
  - Protect the resources and ecology of shorelines
  - Increase public access to publicly owned areas of the shorelines
  - Increase recreational opportunities for the public on the shorelines
- Uses which cause or result in significant concentrations of harmful pollutants and materials subject to blowing which may enter runoff waters shall provide means to insure that such pollutants will not enter the water or air.(SSMP 24.60.525)

DCLU may require the applicant to supply additional information or data needed to evaluate the application, to prepare an environmental assessment, or to make a determination on the application. An application can be cancelled if the applicant has failed without justification to supply required information or data within 90 days of a written request.

Procedures for environmental review are found in Section 7.1.3.

7.1.2.3 Public Notice Requirements

Upon receipt of the application, the Master Use Permit Ordinance, WAC 173-14, requires that the DCLU place four placards near the development site, publish a notice in the Department's Land Use Information Bulletin, and publish two notices a week apart in the local paper to notify the public of the application. The applicant must also erect a large sign near the proposed development to advertise the environmental review process to the public. Since a proposed deep water dredge disposal site is removed from the public, the Seattle DCLU Director would decide an appropriate location for the sign. The public, environmental regulatory agencies included, has 30 days from the last newspaper notice to comment on the application.(34)

The Director makes a decision on the application within 60 days following publication of the second required notice, or within 15 days after issuance of a final environmental impact statement, if required. These time limits do not apply when the Director has requested additional information from the applicant, the applicant modifies the application, public hearing on the application is held, or other land use approvals are included in the application (SSMP).

As part of the review process a public hearing may be held, particularly where:

- The proposed development has broad public significance
- Fifty or more interested persons file a written request for a hearing during the 30 day comment period
- The cost of the proposed development, exclusive of land, will exceed $500,000
- The proposed development will require a shoreline conditional use or variance permit.(SSMP)

Twenty days prior to the hearing, notice must be given. Also, written notice must be mailed to people who request it, at least seven days prior to the hearing date. Seattle gives substantial consideration to public comments in its final decision.

After all relevant reviews and hearings are completed, the Director of DCLU makes a decision. This may take more than two months. If continuous use of the Fourmile Rock site is desired after July of 1984, DCLU must receive DNR's completed application at least by May to allow time for permit processing. If a lapse in the site's availability is not a concern, this time constraint is less important.(66I)

In a permit approval, the Director may attach conditions regarding the location, character and other features of the proposed use, including provision of a performance bond for up to five years. In authorizing a shoreline conditional use, the Director may also impose requirements and conditions with respect to location, installation, construction, maintenance and operation, and extent of open spaces to protect other properties in the shoreline environment and the public's interest in the shoreline. A fee may be charged for a substantial development permit.

Certain time requirements also apply to all substantial development permits. If a project for which a permit has been granted has not been completed within five years after approval of the permit, the Director reviews the permit, and upon a showing of good cause, either extends the permit for one year, or terminates the permit as provided in WAC 173-14.060. Seattle has already exercised this one-time extension authority for the current DNR permit.

However, Seattle can also issue a permit for less than five years. Such an "interim" permit would be considered if information that would allow a better informed decision is expected after July, 1984.

Any ruling on an application, whether approved or denied, must be transmitted to the applicant, and filed with WDOE and the Attorney General. Any person aggrieved by the grant or denial of a substantial development permit may seek review by the Shorelines Hearing Board by filing a request within 30 days of receipt of the final order, and by concurrently filing copies of the request with WDOE and the Attorney General as provided in the Shorelines Management Act.

Since WDOE has this review authority, Seattle's decision is considered a recommendation to the State.(66I)

7.1.3 Environmental Review

Designation of the Fourmile Rock site is an action subject to environmental review under SEPA. SEPA guidelines (WAC 197-20) establish uniform procedures to reduce duplication, integrate planning and licensing by government agencies, encourage public involvement, and promote certainty about requirements. This section explains environmental review and public notice according to the Washington Administrative Code.

7.1.3.1 Lead Agency Status

The lead agency in the SEPA process is responsible for the threshold determination of the need for an environmental impact statement (EIS), and, if required, for the supervision or actual preparation of a draft or final EIS. The State agency that initiates a proposal, DNR in the case of Fourmile Rock, becomes the lead agency. However, any agency may assume lead agency status, if all agencies with jurisdiction agree. Challenges to lead agency status are discussed in Section 7.1.3.3.

7.1.3.2 Threshold Determination

During environmental review, the lead agency must make a decision as to whether an EIS is required. This is done using the environmental checklist included as Appendix B. However, where there is agreement that an EIS is required, the checklist is unnecessary. Such agreement by all concerned agencies is not certain for the Fourmile Rock redesignation process.

To complete the checklist, DNR may need to request additional information from other agencies. The checklist is reviewed in the context of the whole proposal, including direct and indirect effects, to determine if there will be a significant adverse impact on environmental quality. Factors not on the checklist are not considered in the threshold determination. The questions on the checklist are not weighted. Some "yes" answers do not necessarily imply environmental significance. The nature of the existing environment, the absolute quantitative effects of the proposal, and the cumulative effects of marginal impacts are all important factors. Of course, it may be impossible to forecast environmental impacts precisely. If sufficient information is not available an EIS is required. If the checklist can be properly evaluated a threshold determination should be available within 15 days.(13)

If DNR determines that Fourmile Rock redesignation does not require preparation of an EIS, a proposed Declaration of Nonsignificance (DNS) is prepared and distributed to other agencies with jurisdiction, which have 15 days to comment in writing. DNR also notifies the public at this time. After this period and after considering comments the lead agency, DNR, may:

- Adopt the proposed declaration as a final declaration
- Determine that the proposal is significant
- Gather additional information.

Seattle has stated that it will challenge DNR's lead agency status, as discussed in 7.1.3.3, if DNR issues a final DNS. If an affirmative threshold determination is made, DNR circulates a Declaration of Significance and begins preparing a draft EIS. No agency can repeat a threshold determination for the same proposal.

7.1.3.3 Lead Agency Disputes

A lead agency challenge will occur in the Fourmile Rock case if Seattle, or another agency, disagrees with a proposed DNS or believes that DNR is not preparing a proper EIS.

Upon reviewing a proposed DNS, an agency with jurisdiction may transmit a "Notice of Assumption of Lead Agency Status" within the 15 day comment period. This notice states that the consulted agency believes that an EIS is required for the proposal and that the consulted agency assumes lead agency status from the initial lead agency. The new lead agency then has the duty to prepare a draft and final EIS.

Two or more agencies may agree to share responsibilities but one of them must be the nominal lead agency. If the agencies cannot decide on a lead, WDOE is petitioned to resolve the dispute.(13)

7.1.3.4 Environmental Impact Statement

The purpose of the environmental impact statement (EIS) is to provide environmental information for consideration by governmental decision-makers before undertaking major actions. Time limits on the EIS process do not apply when the proponent of the action is also the lead agency.

A draft EIS is used to inform public officials, project sponsors, and interested citizens of a proposed governmental action and to inform the lead agency of the public's concerns. It is focussed on assessment of adverse impacts, consideration of alternatives, and analysis of measures to mitigate impacts. A draft EIS must contain an introduction, table of contents, distribution list, and a description of the proposed action. The remaining sections may be varied but, in general, the following points must be considered:

- Detailed, overly technical reports do not assist decision-makers
- The scope should be sufficiently broad to be useful to other agencies that must approve a proposal
- The lead agency may limit the content and level of detail of some sections to be proportionate with the expected impacts
- Other studies and data may be referenced, rather than explained in detailed discussions
- The relationship between short-term uses and long-term productivity is important
- Impacts that narrow the range of uses or pose long-term risks to human health should be given special attention
- A "reasonableness" test is intended to apply to the range of alternatives considered.

A pre-draft consultation is usually held to discuss the contents of a draft EIS. Agencies so consulted have 45 days to respond in writing.(13)

During its recent presentation to the Interagency Committee, Seattle outlined its position on the reasons for and contents of an EIS for Fourmile Rock.

Seattle has two counterbalancing concerns about the Fourmile Rock site:

- Concern over continued dumping of contaminated materials and potential impacts
- Constraints on the maritime industry and the need for continued dredging to support economic growth.

Seattle believes an EIS is necessary to highlight consequences and alternatives such as capping or moving the site and developing upland sites. The City proposed that the following topics be addressed in a "limited issue" EIS before next summer's shoreline permit decision:

- Description of existing conditions using data collected by METRO, NOAA, the Port of Seattle, and EPA, when it becomes available
- Recommendations for a research program based on proposals by NOAA (28)
- Consideration of upland disposal and regional planning approaches
- Description of measures for mitigating the effects and consequences of using the site
- Exploration of alternative sites.(66 I)

The Corps of Engineers has suggested that such a study could cost more than $100,000. SEPA guidelines neither authorize nor prohibit imposition of fees to cover the costs of EIS preparation. However, consulted agencies may not charge the lead agency for providing data or comments during the EIS process.(13) Members of the Interagency Committee have agreed to investigate funding options.

7.1.3.5 Public Notice Requirements

After a draft EIS is developed it is circulated for review for 35 days. To accomplish notification, WDOE publishes a weekly listing of all DNSs, draft EISs, and final EISs, known as the "SEPA Register." The SEPA regulations establish a long list of Federal, State, and local agencies that must be notified and an even longer list of agencies that may be consulted for their environmental expertise. If a consulted agency does not respond within the allowed time, the lead agency may assume that it has no comments and bar the agency from registering objections later in the process. Public hearing rules are the same as those for SMA.

The lead agency should prepare a final EIS within 75 days of issuance of the draft EIS unless it is unusually complex. The final EIS must contain a summary of comments received, an explanation of changes to the text made in response to comments, and a summary of critical comments with which it does not agree. This document is circulated in the same manner as the draft EIS. The lead agency may take no action for seven days after the final EIS is distributed. After that it can be used in decision-making by the lead agency and other agencies with jurisdication.

7.1.4 Review by WDOE and SHB

WDOE's review of Seattle's recommended decision on the DNR permit would likely not result in any new decisions. The Operations Management Division represents WDOE on the Interagency Committee and the Shorelands Division reviews local permit decisions. Presumably, these divisions would consult with each other well before the Interagency Committee recommendation to pursue a permit. If all of WDOE's concerns are addressed early in the process, WDOE should have no objections to Seattle's final approval of the permit. However, WDOE could impose additional conditions on the permit. If Seattle denies the permit, WDOE considers the decision final.

The Shorelines Hearing Board can review a final decision, if requested, whether it is an approval or denial. In the case of approval, a variety of citizen's groups may appeal for SHB review. Seattle residents, especially in the Queen Anne and Magnolia communities on the Northside of Elliott Bay, perceive a connection between the Fourmile Rock decision and continued growth and development of the area.(661) The Duwamish Navigation Improvement Project depends on the availability of economical disposal sites near the river. Other related issues are the potential uses of Piers 90 and 91, which include Naval facilities, filling and commercial/ industrial development. Individuals or groups opposed to either project, or growth in general, could appeal for SHB review. In the case of denial, affected groups, like the Port of Seattle, sponsor of the Duwamish Project, or the Corps of Engineers, a major dredger of navigation channels, could appeal to SHB.

Since there are proponents of both sides of the issue, it is probable that SHB will be involved in the decision on redesignation of the Fourmile Rock Disposal site. The SHB will decide on the merits of the case.

7.2 OBSTACLES TO DECISION-MAKING

This section discusses technical and administrative obstacles to the redesignation process. Funding problems are also described.

7.2.1 Technical Obstacles

The same problems of lack of information discussed previously apply particularly to the Fourmile Rock site. Scientists and regulators are concerned because studies show that sediments at the site are currently enriched with heavy metals and toxic organic pollutants.(24) There are additional concerns about dredged materials that may be dumped at Fourmile Rock in the future. For example, dredging for navigation or docking occurs frequently in the lower Duwamish River in Seattle. Fish and sediments containing elevated concentrations of pesticides, polychlorinated benzenes and polycyclic aromatic hydrocarbons, as well as diseased bottom fish, have been found there.(29) However, there is not yet enough information to link observed contaminant levels to effects on organisms. Nor are there numerical criteria for determining what contamination levels are acceptable at the site and in dredged sediments. Without these criteria it is difficult to evaluate fully the impact of current and planned disposal activities at Fourmile Rock.

Research projects are being conducted in the Sound by NOAA, EPA, WDOE, METRO, and others. However, research agendas do not focus solely on the Fourmile Rock site, since they are concerned with larger issues. These ongoing studies will eventually provide more clues as to the disposition of Fourmile Rock and recommendations for managing it in an environmentally sound manner. Today, though, a thoroughly informed decision cannot be made. As a condition of permit approval, the City of Seattle may request assurances that this research would be done in a timely manner.(66I)

7.2.2 Administrative Obstacles

The City of Seattle can place conditions on a permit for Fourmile Rock if it is approved. This causes regulatory uncertainty because other environmental and management agencies and developers cannot know what the conditions will be. Examples of options that may be considered include:

- Shortened Time Limit - A one-or-two-year "interim" permit could be issued if, for example, the EIS takes a long time to complete
- Monitoring Requirements - Monitoring could be required for the site and/or the material dumped to develop better data for future decisions
- Research Requirements - Approval could be conditioned on completion, or initiation, of specific studies by specific agencies.

7.2.3 Funding Obstacles

A major question left unresolved at the last Interagency Committee meeting was paying for the EIS. A Corps of Engineers representative, who is familiar with EISs, suggested that $100,000 or more might be needed for a study of the type proposed by Seattle. DNR's lease fees for the site, about $4,000 per year, barely cover administrative and management costs. WDOE is investigating the possibility of using funds allocated for solid waste management.

7.3 CONCLUSIONS

The City of Seattle has clearly stated its position regarding the EIS. An EIS will need to be funded and initiated quickly to serve as an input to Seattle's permit renewal decision. Even if the City issues an interim permit next year, a final EIS will be needed within a year or two. Seattle's straightforward presentation of its permit requirements sets the framework for interagency coordination, which has the potential to facilitate the permitting process.

Investigation of the disposal site should be accompanied by investigation of upland disposal alternatives. Alternative sites must be available for contaminated materials, if there are to be options other than disposal in water or termination of dredging.

Both the SEPA process and the SMA permit process allow many public input points. Public involvement is likely to be extensive in the Fourmile Rock case because of related pollution and growth issues. The public perceives discharges at Fourmile Rock as a way of spreading relatively stable sediments from inside Elliott Bay out into the main basin of Puget Sound. The public also connects the growth and development of port facilities in the lower Duwamish and at Piers 90/91, unwanted by some, to the continued need for dredging and disposal at Fourmile Rock.

Research is needed to fill known information gaps and others identified by the EIS. The EIS has the potential for outlining new research efforts that will need to be funded and implemented. For implementing research efforts, the local permit allows Seattle to place conditions, such as monitoring or fees, on the use of the site.

APPENDICES

APPENDIX A

PUGET SOUND WATER QUALITY DECISION-MAKING STUDY

QUESTIONNAIRE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
WATER

MEMORANDUM

SUBJECT: Puget Sound Water Quality Decision-Making Study

FROM: Bob Linett, Project Officer Bob Linett

TO: Recipients

A study of certain water quality decision-making processes affecting Puget Sound is being conducted by JRB Associates for EPA Headquarters, in cooperation with EPA Region X. The general and specific decision-making processes under evaluation are:

- Clean Water Act Section 301(h) waivers
- Clean Water Act Section 404 dredge and fill permits
- Duwamish River deepening project
- Designation of dredged spoil dumpsites
- Redesignation of the Fourmile Rock dredged spoil dumpsite.

Those of you receiving this memorandum and the attached questionnaire have been selected on the basis of expertise in one or more of the areas listed above.

The questionnaire is designed to elicit information necessary to evaluate the decision-making processes under study. It is focused on such factors as key participants in the decision process, timing and sequencing of the process, and any obstacles to decision-making such as lack of technical data and institutional or statutory constraints. Your expertise on these issues is essential to the study.

Please complete the questionnaire by September 23. In certain cases, interviews with JRB analysts will be arranged during the week of September 26. The questionnaire you receive will indicate whether it should be mailed directly to JRB or held for discussion at an interview. If your expertise includes more than one decision process under evaluation, please fill out a separate questionnaire for each one.

Your cooperation in this study is greatly appreciated. If you have any questions, please do not hesitate to call John Underwood (442-0966) or Tom Wilson (442-1413) at Region X.

Questionnaire for Puget Sound
Water Quality Decision-Making Study

Name ______________________

Position ______________________

Division ______________________

Agency ______________________

Phone ______________________

This questionnaire is part of an EPA study of regulatory decisions that can affect the water quality of Puget Sound. Three general and two specific decison-making processes are being investigated:

☐ CWA Section 301(h) waivers
☐ CWA Section 404 dredge and fill permits
☐ Duwamish River deepening project
☐ Designation of dredged spoil dumpsites
☐ Redesignation of the Fourmile Rock dumpsite.

Please complete the questionnaire only for the area in which you are directly involved, indicating the appropriate box above.

If you have input to more than one of these decisions, please complete a separate questionnaire for each.

Please complete this questionnaire by September 23 and bring it with you to the interview scheduled with JRB analysts during the week of September 26.

Background

1. How is the decision-making process initiated (i.e., by which agency and in what way)?

2. How is your agency informed of its initiation?

3. What is the nature of your agency's involvement in the decision-making process (e.g., review of information for ultimate decision or for advisory opinion)?

4. (a) How many divisions and individuals within your agency are responsible for input to the decision?

   (b) List the divisions and their roles.

(c) List the staff positions and their roles.

Information, Timing and Criteria

5. What group provides the information necessary to reach a decision?

6. How long does it take to acquire the necessary information?

7. Once all the necessary information is acquired, how long does the evaluation take?

8. Is there a required time limit on your review?

9. What evaluation criteria, such as regulations or guidelines, are used to reach a decision?

10. To which agency or office is your decision transmitted?

Obstacles

11. What technical problems, such as lack of data or conflicting information, are encountered in the decision-making process?

12. What administrative difficulties are encountered (e.g., lack of sufficient time or personnel, or incomplete applications)?

13. What statutory or regulatory problems, such as insufficient criteria, are encountered?

14. What other obstacles typically arise?

Coordination with Other Agencies

15. To your knowledge, what other federal, state or local agencies are involved in the decision-making process?

16. What are their roles in the process?

17. (a) Is their review simultaneous with yours?

(b) If not, in what order do the reviews occur?

18. Are other agencies allotted the same amount of time for review as yours is?

19. (a) Does your agency rely on input from another agency before a final decision can be reached?

(b) If so, what agency supplies this information and what is the nature of this input?

(c) Are there obstacles to this information flow?

20. (a) Must another agency receive your input before a final decision can be reached? If so, which agency?

(b) Are there obstacles to this process?

21. (a) What agency coordinates inputs to the decision-making process?

(b) How is this accomplished?

22. How is your review affected if another agency:

(a) denies the permit, approval or certification?

(b) objects to the proposed action?

(c) fails to approve, deny or comment within the allotted time?

Environmental Impact Statement

23. (a) When and by what agency is an Environmental Impact Statement required?

(b) At what point in the decision-making process is this determination made?

24. (a) Which agencies review an Environmental Impact Statement?

(b) Which agency is responsible for the final decision on the Environmental Impact Statement?

25. How does approval of an Environmental Impact Statement affect the grant or denial of a permit or certification?

Public Input

26. (a) Is public notice of the proposed action required?

(b) When, for how long, in what form, and by what agency must notice be given?

27. (a) Is a public comment period required?

(b) How long is it?

28. What effect do negative public comments have on the decision-making process?

29. (a) Must public hearings be held?

(b) What triggers non-mandatory public hearings?

(c) At what point in the process does this occur?

(d) How does a public hearing affect the time frame for decision-making?

30. How and by whom are the results of a public hearing incorporated into the decision?

31. What obstacles to informed public input are likely to arise?

Please attach a copy of the following documents:

1. An organizational chart of your agency and division.
2. A flow chart of the decision-making process within your agency.
3. A copy of the regulations or guidelines that serve as criteria for the decision.

APPENDIX B

STATE OF WASHINGTON ENVIRONMENTAL CHECKLIST FORM

APPENDIX B

STATE OF WASHINGTON ENVIRONMENTAL CHECKLIST FORM

The State Environmental Policy Act of 1971, Chapter 43.21, Revised Code of Washington, requires all state and local governmental agencies to consider environmental values both for their own actions and when licensing private proposals. The Act also requires that an Environmental Impact Statement (EIS) be prepared for all major actions significantly affecting the quality of the environment. The purpose of this checklist is to help the agencies involved determine whether or not a proposal is such a major action.

Applicants must answer the following questions as completely as possible with the information presently available. Where explanations of answers are required, or where an explanation would be helpful to government decision makers, include an explanation in the space provided, or use additional pages if necessary. Include references to any reports or studies which are relevant to the answers provided. Complete answers to these questions will help all agencies involved with a proposal to undertake the required environmental review without unnecessary delay.

The following questions apply to your total development proposal, not just to the license for which an applicant is currently applying or the proposal for which approval is sought. Answers should include the impacts which will be caused by a proposal when it is completed, even though completion may not occur until sometime in the future. This will allow all of the agencies which will be involved to complete their environmental review now, without duplicating paperwork in the future.

NOTE: This is a standard form being used by all state and local agencies in the State of Washington for various types of proposals. Many of the questions may not apply to your proposal. If a question does not apply, just answer it "no" and continue on to the next question.

WL:nrd
IB5/209.16

ENVIRONMENTAL CHECKLIST FORM

I. BACKGROUND

A. Name of Proponent:

B. Address and Phone Number of Proponent:

C. Date Checklist Submitted:

D. Agency Requiring Checklist:

E. Name of Proposal, if applicable:

F. Nature and Brief Description of the Proposal (including but not limited to its size, general design elements, and other factors that will give an accurate understanding of its scope and nature):

G. Location of Proposal (describe the physical setting of the proposal, as well as the extent of the land area affected by any environmental impacts, including any other information needed to give an accurate understanding of the environmental setting of the proposal):

II. ENVIRONMENTAL IMPACTS

(Explanations of all "yes" and "maybe" answers are required).

A. Earth. Will the proposal result in:	Yes	Maybe	No
1. Unstable earth conditions or in changes in geologic substructures?	___	___	___
2. Disruptions, displacements, compaction, or overcovering of the soil?	___	___	___
3. Change in topography or ground surface relief features?	___	___	___
4. The destruction, covering, or modification of any unique geologic or physical features?	___	___	___
5. Any increase in wind or water erosion of soils, either on or off the site?	___	___	___
6. Changes in deposition or erosion of beach sands, or changes in siltation, deposition, or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?	___	___	___

Explanation:

B. Air. Will the proposal result in:			
1. Air emissions or deterioration of ambient air quality?	___	___	___
2. The creation of objectionable odors?	___	___	___

Yes Maybe No

9. Reduction in the amount of water otherwise available for public water supplies: ___ ___ ___

Explanation:

D. Flora. Will the proposal result in:

1. Change in the diversity of species, or numbers of any species of flora (including trees, shrubs, grass, crops, micro-flora and aquatic plants)? ___ ___ ___

2. Reduction of the numbers of any unique, rare or endangered species of flora? ___ ___ ___

3. Introduction of new species of flora into an area, or in a barrier to the normal replenishment of existing species? ___ ___ ___

4. Reduction in acreage of any agricultural crop? ___ ___ ___

Explanation:

E. Fauna. Will the proposal result in:

1. Changes in the diversity of species, or numbers of any species of fauna (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, or micro-fauna)? ___ ___ ___

2. Reduction of the numbers of any unique, rare or endangered species of fauna? ___ ___ ___

3. Introduction of new species of fauna into an area, or result in a barrier to the migration or movement of fauna? ___ ___ ___

	Yes	Maybe	No
K. Population. Will the proposal alter the location, distribution, density, or growth rate of the human population of an area?	___	___	___

Explanation:

	Yes	Maybe	No
L. Housing. Will the proposal affect existing housing or create demand for additional housing?	___	___	___

Explanation:

M. Transportation/Circulation. Will the proposal result in:

	Yes	Maybe	No
1. Generation of additional vehicular movement?	___	___	___
2. Effects on existing parking facilities, or demand for new parking?	___	___	___
3. Impact upon existing transportation systems?	___	___	___
4. Alterations to present patterns of circulation or movement of people and/or goods?	___	___	___
5. Alterations to waterborne, rail, or air traffic?	___	___	___
6. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	___	___	___

Explanation:

	Yes	Maybe	No
2. Communications systems?	___	___	___
3. Water?	___	___	___
5. Seer or septic tanks?	___	___	___
5. Storm water drainage?	___	___	___
6. Solid waste and disposal?	___	___	___

Explanation:

Q. Human Health. Will the proposal result in the creation of any health hazard or potential health hazard (excluding mental health)? ___ ___ ___

Explanation:

R. Aesthetics. Will the proposal result in the obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view? ___ ___ ___

Explanation:

S. Recreation. Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities? ___ ___ ___

Explanation:

APPENDIX C

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APPENDIX C

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